SI 363 W45 1908

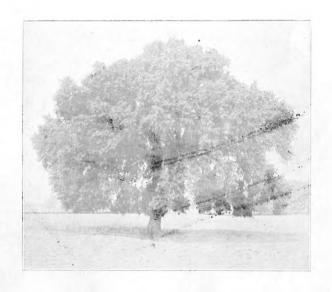








West Virginia Arbor and Bird Day



Friday, April 10, 1908



WEST VIRGINIA

ARBOR AND BIRD DAY ANNUAL

1908

Program, Notes, and Suggestions

FOR

FRIDAY, APRIL TENTH

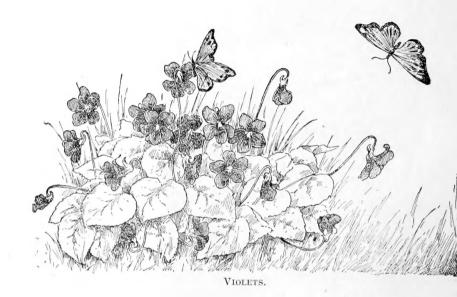
ISSUED BY THE DEPARTMENT OF SCHOOLS

CHARLESTON

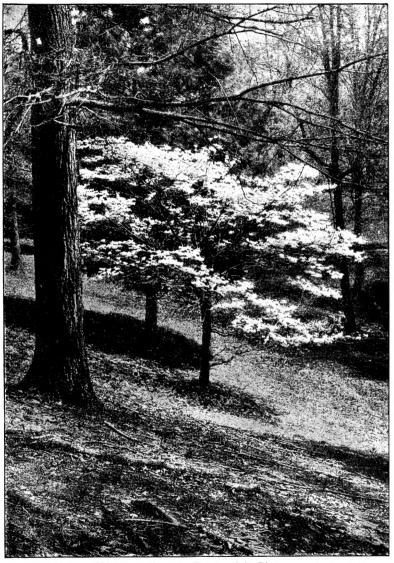


THOS. C. MILLER, STATE SUPERINTENDENT.

SI368 .W4-5 1908



D. OF D.



Woods in Spring—Dogwood in Blossom

From Agriculture: Its Fundamental Principles. By Soule and Turpin,
Permission B. F. Johnson Publishing Co., Richmond, Va.



ARBOR AND BIRD DAY ANNOUNCEMENT.

In most states of the Union an Arbor Day is provided for by law, but in West Virginia no measure of this kind has ever been enacted by our Legislature. The observance of such an occasion, however, has not been overlooked by our people, and every year for over a quarter of a century, the schools of the State have been observing an Arbor Day appointed by the State Superintendent of Schools. Not only has this work resulted in improving school grounds and school surroundings in many places, but its influence has reached the homes of our people and shows itself in improved conditions there. More shade trees have been planted; shrubbery and flowers have been put out; the garden has been cleaned up and made more attractive; and the influence of such work made to show itself in many ways on the farm, on the streets of our cities, and in public places.

In accordance with this custom, the second Friday in April has been observed by our schools for a number of years as Arbor Day, and I trust that more will be accomplished this year than ever before. There should be general interest in this work all over the state on Friday, April the tenth. Let its influence be seen not only around our school buildings and our country homes, but in towns and cities as well. The streets in many of our cities, towns and villages can be greatly improved by tree-planting and proper arrangement of shrubbery. Not only will the effect of this work be felt in an ethical sense, but it will also have a bearing on sanitary conditions because beauty and cleanliness are very intimately related. Furthermore, a general movement for civic betterment would manifest itself in behalf of good roads, the preservation of our forests, a purer water supply and all that relates to our material, social and educational progress.

I suggest also that special prominence be given to the subject of bird study and that on this occasion Audubon Societies be organized in many of our schools. Our sengsters are fast disappearing, and the youth of this state should be taught to love and protect the birds instead of destroying them.

Trusting that Arbor Day may be observed all over the state this year, and that its beneficent influence will be felt not only now, but leave a rich heritage for the future, I am

Very sincerely.

Flux. Oscillar.
State Supt. of Schools.

CHARLESTON, W. VA., March 10, 1908.

INTRODUCTION.

If the observance of Arbor Day ends with the exercises in the school room, however pleasant and entertaining they may be, the real purpose of the day will not have been accomplished. There must be some practical work not only in and around the school building, but the influence must reach the home surroundings as well. In some schools in former years, every pupil has pledged himself to plant something at home, either a tree, shrub, flower or something in the garden, and the interesting stories that could be told of some of this work done in this state years ago, would fill a book. The true spirit of Arbor and Bird Day is the influence on the life and character of the pupils as exemplified in practical work. A love for the beautiful as well as a desire for the more useful should be cultivated, and all that pertains to material prosperity should be made prominent. not always the homes of the more wealthy, but the homes surrounded by indications, of taste, culture and refinement that are the most attractive. These things being emphasized, the vouth of our state will have better ideals and will be prepared to take higher standing as citizens of our commonwealth. Let us then make Arbor and Bird Day practical by doing some real planting and by learning something useful about trees, birds and the great animate world about us.

A number of suggestions under "Notes and Suggestions" will be found in the Annual, and the beautiful plates, both colored and halftone, will tell their own story. These illustrations of what has been done in many places in the way of improving school grounds and bettering the conditions of home and village life, will, it is believed, prove helpful to many of the youth of this state, showing them what can be done where there is a desire for better things.

Acknowledgment is hereby made to the National Audubon Societies of New York City, to Houghton, Mifflin & Co., Boston, to Ginn & Co., New York, to B. F. Johnson Pub. Co., Richmond, Virginia, to Supt. O. J. Kern, Rockford, Illinois, to Prof. A. B. Graham of the Ohio State University, and to the Flower Mission, Cleveland, Ohio, for a number of the cuts in the Annual.

SUGGESTIVE PROGRAM FOR ARBOR AND BIRD DAY.

Song—The West Virginia Hills.

Responsive Scripture Reading-Teacher and School.

Reading the President's Message to the school children of the United States.

Reading the Governor's letter to the schools of West Virginia.

Reading—The History of Arbor Day.

Essay—Benefits of Trees, Flowers and Birds.

Essay—The Trees Most Common in our County.

Essay-Beautify School Grounds.

Essay-"How Birds Help Us."

Reading-Some Historic Trees.

Exercises—"What the Trees Teach Us," by fourteen pupils.

"Trees in the Seasons," by four pupils.

Ouotations and Gems.

Song—"We Love the Trees."

Recitations, poems and extracts, concerning Trees, Birds and Flowers.

Brief reports of observations by pupils:

- (a) Of Nice School Grounds.
- (b) Of Well-kept Home Grounds.
- (c) Of Shaded Avenues and Roads.
- (d) Of Beautiful Trees.
- Of Large Forest Areas.

Paper—"The Importance of Protecting the Forests of West Virginia."

Short address by a speaker chosen for the occasion.

Brief remarks by trustees, members of the board and others.

Instruction as to planting both in school grounds and at home.

Music—"America."

Planting and dedication of Trees.

Song—"Columbia, the Gem of the Ocean."

SUGGESTIONS.

1. Provide plenty of good music, and decorate the school room with pictures of trees, birds and pretty homes.

2. Give especial emphasis to poems, quotations and to reports by the pupils.

3. Select trees and shrubbery for planting before hand, and have the ground made ready in time—a good rich soil.

4. The program should be long enough to admit of variety, but not so long as to be wearisome. Give places upon it to all the pupils, if possible. Have much in it about Arbor day and about trees, flowers and birds. Pieces included in the suggested program will be found either in this Annual, or in the Annuals of former years.

SCRIPTURE READING FOR ARBOR DAY.

Teacher—I will plant in the wilderness the cedar 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.

Pupils—Blessed is the man whose delight is in the law of the Lord, He shall be like a tree planted by the streams of water that bringeth its fruit in its season, whose leaf also doth not wither, and whatsoever he doeth shall prosper.

Teacher—I went down into the garden of nuts to see the fruits of the valley, and to see whether the vine flourished, and the pomegranates budded.

Pupils—And the tree of the field shall yield her fruit, and the earth shall yield her increase, and they shall be safe in their land, and shall know that I am the Lord.

Teacher—For the Lord thy God bringeth thee into a good land; a land of brooks of water of fountains and depths that spring out of valleys and hills; a land of wheat and barley and vines, and figtrees, and pomegranates; a land of oil, olive and honey; a land wherein thou shalt eat bread without scarceness, thou shalt not lack anything in it; a land whose stones are iron, and out of whose hills thou mayest dig brass.

Pupils—And Israel said take of the best fruits of the land in your vessels, and carry down the man a present, a little balm, and a little honey, spices, and myrrh, nuts and almonds.

Teacher—Wisdom is a tree of life to them that lay hold upon her; and happy is every one that retaineth her.

Pupils—The fruit of the righteous is a tree of life.

Teacher—Even so every good tree bringeth forth good fruit; but a corrupt tree bringeth forth evil fruit.

Teacher and School—To him that overcometh will I give to eat of the tree of life, which is in the midst of the paradise of God.



Тие Рноеве.



THE RED-HEADED WOODPECKER.

Courtesy U. S. Department of Agriculture.

PROCLAMATION OF THE PRESIDENT TO THE SCHOOL CHILDREN OF THE UNITED STATES.

TO THE SCHOOL CHILDREN OF THE UNITED STATES:

Arbor Day (which means simply "Tree Day") is now observed in every State in our Union—and mainly in the schools. At various times from January to December, but chiefly in this month of April, you give a day or part of a day to special exercises and perhaps to actual tree planting, in recognition of the importance of trees to us as a nation, and of what they yield in adornment, comfort, and useful products to the communities in which you live.

It is well that you should celebrate your Arbor Day thoughtfully, for within your lifetime the Nation's need of trees will become serious. We of an older generation can get along with what we have, though with growing hardship; but in your full manhood and womanhood you will want what nature once so bountifully supplied and man so thoughtlessly destroyed; and because of that want you will reproach us, not for what we have used, but for what we have wasted.

For the nation as for the man or woman and the boy or girl, the road to success is the right use of what we have and the improvement of present opportunity. If you neglect to prepare yourselves now for the duties and responsibilities which will fall upon you later, if you do not learn the things which you will need to know when your schools days are over, you will suffer the consequences. So any nation which in its youth lives only for the day, reaps without sowing, and consumes without husbanding must expect the penalty of the prodigal, whose labor could with difficulty find him the bare means of life.

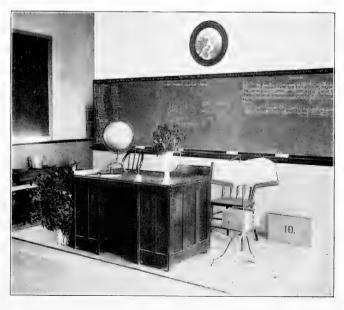
A people without children would face a hopeless future; a country without trees is almost as hopeless; forests which are so used that they can not renew themselves will soon vanish, and with them all their benefits. A true forest is not merely a storehouse full of wood, but, as it were, a factory of wood, and at the same time a reservoir of water. When you help to preserve our forests or to plant new ones you are acting the part of good citizens. The value of forestry deserves, therefore, to be taught in the schools, which aim to make good citizens of you. If your Arbor Day exercises help you to realize what benefits each one of you receive from the forests, and how by your assistance these benefits may continue, they will serve a good end.

THEODORE ROOSEVELT.

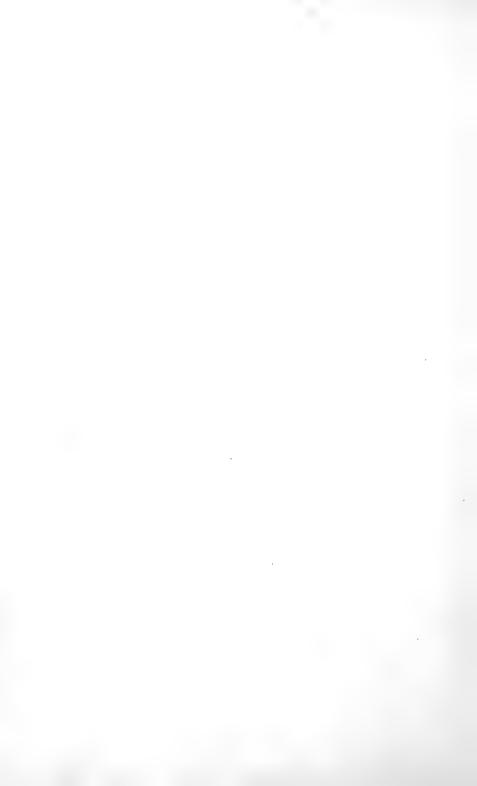


A SUGAR MAPLE.

Thousands like this in West Virginia. Is there one in your Home Grounds or in your school yard?



FLOWERS ADD TO THE HOME-LIKENESS OF THE SCHOOL-ROOM.



GOVERNOR DAWSON'S LETTER TO THE SCHOOLS.

CHARLESTON, W. VA., March 12, 1908.

To the School Children of West Virginia:

Your good head-master, Mr. State Superintendent Thomas C. Miller, has asked me to write a word about Arbor Day, which is also Bird Day and Cleaning-up Day.

We ought to make war on dirt and filth, because wise men have found out that disease is caused by tiny animals, which we cannot see with the naked eye, and that these dreadful things breed and live in dirt and filth.

Birds: What girl or boy who does not love birds! Would it not be well for each of you to learn all you can about the birds of West Virginia: their names, their songs and calls, their colors, how they build their nests, where they go in the winter, and other things about them?

Arbor Day means the same as "Tree Day." If it can be done, let everyone, or a number of you together, plant a tree, give it a name, write down an account of the planting, which will tell the kind of tree planted, where planted, who they were that planted it, and the name vou gave it. But the tree will need care after it is planted, at least while it is young; agree about caring for it. Arbor Day is also a fit day to care for trees, to see that those planted before have needed attention. Trees are living things, though they cannot move about from place to place, as birds and dogs do; but trees eat, breathe. have blood, and they go to sleep and wake up again. Trees are very useful. Find out in how many ways trees are useful. Why are crowds of trees which we call forests useful; and how may we protect our forests from being destroyed? I am going to Washington to meet the President and the Governors of all the other States, and on the 13th, 14th and 15th days of May we will talk about the value of forests and how they can best be preserved. I shall be glad to have you write me how you think it can best be done. Learn about the trees of West Virginia: their names and kinds, their uses, where they grow, why one kind of a tree grows in one place and another kind of a tree grows in another place, and so forth.

Everything that is useful is good, and everything that is good is useful.

Wm.MoDawson,

ORIGIN AND HISTORY OF ARBOR DAY.

The first to call attention in this country, in an impressive way, to the value and absolute need of trees was the eminent scholar and wise observer, Mr. George P. Marsh, for many years our worthy representative at the courts of Italy and Turkey. His residence in those older countries was calculated to draw his attention to the subject as it would not have been drawn had he always lived in his native land.

In Europe Mr. Marsh found the governments of Italy and Germany, as well as those of other countries, making active endeavors and at great expense to rehabilitate their forests, which had been depleted centuries before, to guard them from depredation, and instead of leaving them to be consumed at the bidding of personal greed or recklessness, cherishing them as among their most precious possessions . . . He found schools, of a grade corresponding to our colleges, established for the special purpose of training men for the successful planting and cultivation of forests. He found the growth of trees in masses and their maintenance reduced to a science, and the management of the woodlands constituting one of the most important departments of state.

Such discoveries were well calculated to fix his attention upon the very different condition of the forests in his own country, and to convince him that the reckless destruction of them then going on here, if not checked, would bring upon this land the same calamities which had befallen countries of the Old World in past centuries and from which only the most enlightened nations of Europe are now recovering, through the ardous efforts of many decades, and at great pecuniary cost. The result of Mr. Marsh's observations was the publication of a volume entitled "The Earth and Man," and to the admirable chapter on "The Woods," more than to any other source, perhaps we are indebted for the awakening of attention here to our destructive treatment of the forests, and the necessity of adopting a different course if we would avert most serious consequences, threatening more than anything else, possibly, our material welfare.

construction the government, at the beginning of the last century, purchased certain tracts of live-oak timber, and about twenty-five years later, by an act of Congress, the President was authorized to take measures for their preservation. About the same time the Massachusetts Society for Promoting Agriculture offered prizes for forest planting, and thirty years later the State ordered a survey of her timber lands. Thirty years later still, acts began to be passed for

the encouragement of timber planting, chiefly in the treeless western states. The well-known timber culture act was one of these. It made a free gift of the public lands to the successful planter of forest trees on one fourth of his entry.

About twenty-five years ago the subject of forest destruction and its detrimental results came before the American Association for the Advancement of Science for consideration, and as a result of its discussions the association memoralized Congress, asking that measures be taken for the protection of the public timber lands. In consequence of this, a committee of the House of Representatives was appointed to consider the establishment of a forestry department of the government, and two years later the Commissioner of Agriculture was authorized to appoint a forest commissioner, which was the foundation of the present Forestry Division in the Department of Agriculture.

It was at this time, or a few years earlier, that a practical movement was inaugurated by Hon. J. Sterling Morton, Secretary of Agriculture under President Cleveland. This was the establishment of American Arbor Day, or tree-planting day.

It was at annual meeting of the Nebraska State Board of Agriculture, held in the City of Lincoln, January 4, 1872, that Mr. Morton introduced the following resolution:

Resolved, That Wednesday, the 10th day of April, 1872, be and the same is hereby especially set apart and consecrated for tree planting in the State of Nebraska, and the State Board of Agriculture hereby name it Arbor Day, and to urge upon the people of the State the vital importance of tree planting, hereby offer a special premium of one hundred dollars to the Agricultural Society of that county in Nebraska which shall, upon that day, plant properly the largest number of trees; and a farm library of twenty-five dollars' worth of books to that person who, on that day, shall plant properly, in Nebraska, the greatest number of trees.

After a little debate as to the name, some prefering Sylvan instead of Arbor, the resolution was unanimously adopted. A second resolution was likewise adopted asking the newspapers of the state to keep the matter constantly before the people until the appointed day; and the result was the planting of over a million trees in Nebraska on April 10, 1872.

From this beginning on that western prairie the movement has spread in an ever widening circle whose circumference today sweeps from the Atlantic to the Pacific, while all appreciate the poet's thought: "He who plants a tree plants a hope".



TO THE DANDELION.

Dear common flower, that grow'st beside the way,
Fringing the dusty road with harmless gold,
First pledge of blithesome May,
Which children pluck, and, full of pride uphold,
High-hearted buccaneers, o'erjoyed that they
An Eldorado in the grass have found,

Which not the rich earth's ample round

May match in wealth, thou are more dear to me

Than all the prouder summer blooms may be.

-James Russell Lowell.

ARBOR DAY SONG.

(Air: Hold the Fort.)

Friends and parents gather with us, In our school today, Thoughts of groves and tangled wildwoods, In our minds hold sway.

CHORUS.

Spare the trees, oh thoughtless woodman, Hew but what you need, They give balm to vagrant breezes, For their lives we plead.

Giant oaks in sunny pastures
Cast their pleasant shade
Maples clad in gold and crimson
Cheer the darkened glade.

Lofty firs and murmuring pine trees Shading mountain's crest, Are the growth of weary ages; For them we protest.

Heralded in leafy banners, Season's four we greet; Every bough a sacred temple For the song birds sweet.

-Iowa Special Days.

RECITATION.

Do you know the trees by name When you see them growing In the fields or in the woods? They are well worth knowing.

Watch them in the early spring, When their buds are swelling; Watch each tiny little leaf Leave its little dwelling.

Watch them later, when their leaves Everywhere are showing; Soon you'll know the different trees When you see them growing.

-Selected.

WHAT THE TREES TEACH US.

First Pupil.

I am taught by the Oak to be rugged and strong In defense of the right; in defiance of wrong.

Second Pupil.

I have learned from the Maple, that beauty to win The love of all hearts, must have sweetness within.

Third Pupil.

The Beech, with its branches wide-spreading and low, Awakes in my heart hospitality's glow.

Fourth Pupil.

The Pine tells of constancy. In its sweet voice It whispers of hope till sad mortals rejoice.

Fifth Pupil.

The nut-bearing trees teach us that 'neath manners gruff May be found as "sweet kernels" as in their caskets rough.

Sixth Pupil.

The Birch, in its wrapings of silvery gray, Shows that beauty needs not to make gorgeous display.

Seventh Pupil.

The Ash, having fibers tenacious and strong, Teaches me firm resistance, to battle with wrong.

Eighth Pupil.

The Aspen tells me with its quivering leaves, To be gentle to every sad creature that grieves.

Ninth Pupil.

The Lombardy Poplars point upward, in praise, My voice to kind Heaven they teach me to raise.

Tenth Pupil.

The Elm teaches me to be pliant yet true; Though bowed by rude winds, it still rises anew.

Eleventh Pupil.

I am taught generosity, boundless and free, By the showers of fruit from the dear Apple tree.

Twelfth Pupil.

The Cherry tree blushing with fruit crimson red, Tells of God's free abundance that all may be fed.

Thirteenth Pupil.

In the beautiful Linden, so fair to the sight, This truth I discern: It is inwardly white.

Fourteenth Pupil.

The firm-rooted Cedars like sentries of old,

Show that virtues deep-rooted may also be bold.

—Helen O. Hoyt, in the Teacher's World

TREES IN THE SEASONS.

First Child.

I love a tree in spring
When the first green leaves come out;
And the birds build their nests and carol
Their sweet songs round about.

Second Child.

I love a tree in summer,
When in the noon-tide heat,
The reapers lie in its shadow
On the greensward, cool and sweet.

Third Child.

I love a tree in autumn,
When Frost, the painter old,
Has touched with his brush its branches,
And left them all crimson and gold.

Fourth Child.

I love a tree in winter,

Mid snow and ice and cloud,

Waving its long, bare branches,

In the north wind, wailing loud.

All.

Let us plant a tree by the wayside, Plant it with smiles and with tears, A shade for some weary wanderer, A hore for the coming years.

THE COVING OF SPRING.

The birds are coming home soon; I look for them every day: I listen to catch the first wild strain, For they must be singing by May.

The bluebird, he'll come first you know, Like a violet that has taken wings; And the redbreast trills while his nest he builds, I can hum the song that he sings.

And the crocus and the wind-flower are coming, too; They're already upon the way; When the sun warms the brown earth through and through, I shall look for them any day.

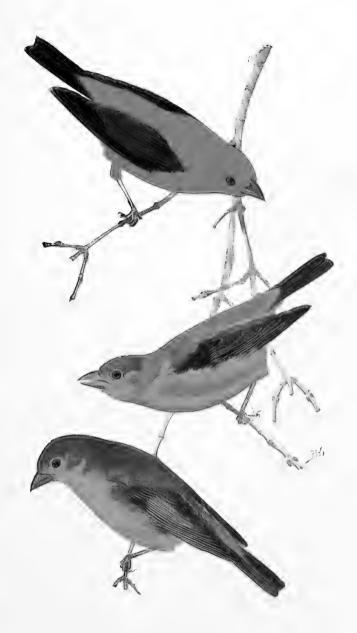
Then be patient, and wait a little, my dear; "They're coming" the winds repeat; "We're coming! we're coming!" I'm sure I hear, From the grass blades that grow at my feet. -Selected from "Nature in Verse."

ON GRANDPA'S FARM.

Miss Dolly went a walking Out in a lovely park. Beside her ran a striped squirrel, Above it sang a lark.

She stood knee deep in clover And watched the light clouds pass, And no policeman shouted out., "Hi, there! Keep off the grass!"

She gathered rosy apples, Beneath the spreading trees, And no old apple woman said, "A nickel, if you please."



SCARLET TANAGER

1. Adult Male. 2. Adult Male, Changing to Winter Plumage. 3. Adult Female.

Order—Passeres Genus—Piranga Family—Tanagridæ Species—Erythromelas





Bethel Township (Miami County, Ohio) High School Building erected in 1893. Four years in course. 1000 volumes in library. Farmers'
Institutes and Lecture Courses. First Grade. Stables and large well planted playground. Telephone,
Gasoline lighting system, Piano and well selected Pictures.

Courtesy Prof. A. B. Graham, Ohio State University.



A FLOWER SHOW BY PUPILS IN A SCHOOL IN PECATONICA TOWNSHIP, ILLINOIS. Courtesy Supt. O. J. Kern, Rockford, Ills.



She plucked the dainty violets
That all around her grew,
And no boy flower peddler cried,
"I'll take ten cents from you!"

How is it she's so favored?

Who knows where lies the charm?

The secret's here, my little dear—

She's out on grandpa's farm.

Elizabeth Hyatt, in Detroit Free Press.

THE ROBIN AND THE FLOWER.

A Robin once sat in the bright winter's sun,
A foolish red robin was he,
For he sang a sweet song that springtime had come
When the day was as cold as could be.

So gay was his song of the warmth of the hour, So merrily babbled the sound, That it stole through the dream of a dear little flower Who was slumbering under the ground.

The sleeper awakened, soft lifted the sod
And harkened the robin's sweet song,
Full glad was her heart and thankful to God
That winter so quickly had gone.

The robin still sang and the dear little flower
Unfolded her petals of pink:—
"I'll hold up my chalice," she said, "for a shower
That from me my robin may drink."

The singer flew quickly to welcome his love,—
His love that was faltering low:—
Oh, where was the warmth from the heaven above?
Instead of a shower there was snow.

Then robin quick covered her o'er with his wing, "Don't leave me, I love you," he cried:

And he kissed her so tenderly, poor little thing,
But the blossom, his loved one, had died.

Red robin still sits in the bright winter's sun,
But a sorrowing robin is he;
No longer he sings that the springtime has come
When the day is as cold as can bo.

-Charles A. Myall.

Now rings the woodland loud and long,
The distance takes a lovelier hue,
And drowned in yonder living blue
The lark becomes a sightless song.

-Tennyson-In Memoriam.

Welcome, ye shades! ye bowery Thickets hail! Ye lofty Pines! ye venerable Oaks! Ye Ashes wild, resounding o'er the steep! Delicious is your shelter to the soul.

-Thompson-Seasons. Summer.

The year's at the spring,
And day's at the morn;
Morning's at seven:
The hill-sides dew pearled:
The larks on the wing:
The snails on the thorn;
God's in his heaven—
All's right with the world!

-Browning.

In fact there is nothing that keeps its youth So far as I know, but a tree and truth.

-υ. W. Holmes.

There's never a leaf or blade too mean To be some creature's palace.

-Lowell.

Give fools their gold and knaves their power; Let fortune's bubbles rise and fall; Who sows a field or trains a flower, Or plants a tree, is more than all.

-Whittier.

Flowers are the sweetest things God ever made and forgot to put a soul inte.

-Beecher.

The best verses I have printed are the trees I have planted.

-Holmes.

There was never mystery
But 'tis figured in the flowers;
Was never secret history
But birds tell it in the bowers.

-Emerson.

QUOTATIONS FOR ROLL CALL.

I think no man does anything more visibly useful to posterity than he who plants a tree.—J. R. Lowell.

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 ourselves.—O. W. Holmes.

In those vernal seasons of the year, when the air is calm and pleasant, it were an injury and sullenness against nature not to go out and see her riches, and partake in her rejoicing with heaven and earth.—Milton.

Though we travel the world over to find the beautiful, we must carry it with us or we find it not.—Emerson.

Now every field and every tree is in bloom; the woods are now in full leaf, and the year is in its highest beauty.—Virgil.

The tree planter and teacher united in one shall be declared the best benefactor of modern times—the chief provider for posterity.—

J. Sterling Morton.

Our yards, our school house yards, and the resting places of our dead, should not be neglected, but should be adorned with nature's own beauties—the trees.— $Emma\ F.\ Bates.$

Do not rob or mar a tree, unless you really need what it has to give you. Let it stand and grow in virgin majesty, ungirdled and unscarred, while the trunk becomes a firm pillar of the forest temple, and the branches spread abroad a refuge of bright green leaves for the birds of the air.—Dr. Henry Van Dyke.

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

To own a bit of ground, to scratch it with a hoe, to plant seeds and watch their renewal of life—this is the commonest delight of the race, the most satisfactory thing one can do.—Charles Dudley Warner.

There is no spot on earth which may not be made more beautiful by the help of trees and flowers.—Holmes.

Whether pluming the mountains, edging the lake, eye-lashing the stream, roofing the water-fall, sprinkling the meadow, burying the homestead, or darkening leagues of hill, plain and valley, trees have always "haunted me like a passion."—Alfred B. Street.

What earnest worker, with hand and brain, for the benefit of his fellowmen, could desire a more pleasing recognition of his usefulness

than the monument of a tree, ever growing, ever blooming, and ever bearing wholesome fruit?—Irving.

With every green tree that surrounds us with its leafage, with every shrub on the roadside where we walk, with every grass-blade that bends to the breeze in the field through which we pass, we have a natural relationship; they are our true compatriots. The birds that leap from twig to twig in our gardens, that sing in bowers, are part of ourselves.—Goethe.

A man does not plant a tree for himself; he plants it for posterity; and sitting idly in the sunshine, I think at times of the unborn people who will to some extent be indebted to me. Remember me kindly, ye future men and women.—Alexander Smith.

What conqueror in any part of life's battle could desire a more beautiful, a more noble, or more patriotic monument than a tree planted by the hands of pure and joyous children, as a memorial to his achievements?—B. J. Lossing.

For many years I have felt a deep interest in the preservation of our forests and the planting of trees. The wealth, beauty, fertility and healthfulness of the country largely depend upon it. My indignation is yearly aroused by the needless sacrifice of some noble oak or clm and especially of the white pine, the grandest tree in our woods, which I would not exchange for the oriental palm. My thanks are due to the public school which is to plant a group of trees in your Eden Park in my honor.—John G. Whittier, to the school children of Cincinnati.

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.

NOTES AND SUGGESTIONS.

On what day did you hear the first Blue Bird, the first Robin, the first Red Wing?

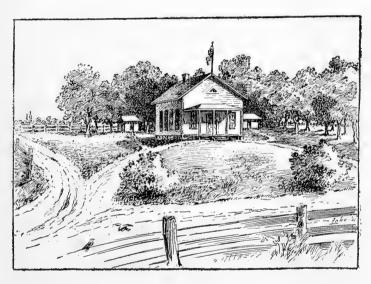
What was the circumference of the largest strawberry you ever raised?

Do not fail to plant something on Arbor Day. If it is but a rose

bush, a grape vine or row of sweet peas, contribute this much in honor of the occasion. Your reward will come later.

Teachers desiring to secure pictures of larger size and suited for framing, will do well to write to Curtis & Cameron, Boston, for a catalog of the Copley Prints.

Market gardening has become a very fruitful source of income to many of our farmers in different sections of the state. The mining and manufacturing centers are good markets right near home and the wide-awake producer will take advantage of the opportunity thus offered.



Do you believe in "strawberries and cream" materially, socially, morally and educationally for the youth of this state? In this reference, "strawberries and cream" means the best things in life. Do you not desire that your children shall enjoy them?

I believe all our readers will be pleased with the beautiful colored plates found in the Annual. They are in the highest style of reproduction of this character and, I believe, worthy a place in book collections and on school room walls.

Teachers and others desiring to get a variety of flower seeds this

spring, would do well to address the Flower Mission, Cleveland, Ohio, which will also furnish an illustrated pamphlet giving detailed instructions on children's school and home gardens.

If you can get your boys and girls interested in bird study, it is an excellent plan for them to keep a bird calendar in which they shall record the spring arrival of their feathered friends and make note of other interesting observations.

For the use of the cuts found in the Annual, we are indebted to the courtesy of a number of prominent publishing houses to whom we have given credit. I am sure our readers will appreciate these nice pictures and want to know more about the books from which they come.

As will be noticed, I have printed in the Annual information relating to the organization of Audubon Socities. I hope teachers all over the state will take up this good work and that West Virginia may not be reckoned any longer as "unorganized" in this splendid work for the preservation of the birds.

Why do we not have more fruits around many of our country homes? Trees and shrubs cost but little and by the budding and grafting process any thrifty grower can add very materially to his stock of home supplies.

Too little attention is given both by teachers and school officers to the out-buildings about our school houses. As I have said more than once before, these buildings in many places are a disgrace to a civilized people. Shall we not have an awakening on this subject?

As a very excellent means of decorating school rooms, there is nothing more appropriate than the Perry Pictures. The five and ten cent pictures of this class are very well suited for school room adornment.

Planting should not be confined to shade trees and shrubbery, but fruit trees as well may be put out on Arbor Day. A Yellow Transparent, a Baldwin, an Alexander Peach or a Bartlett Pear will in years to come not only be a reminder of a pleasant occasion, but the fruit will be a means of gratification as well as profit.

By the recent action of the Legislature, elementary Agriculture is now one of the branches to be taught in our public schools, and while teachers are not now required to pass an examination on this subject, it is very natural to conclude that a few years hence this subject will be included in the list of branches upon which applicants for certificates will have to pass.

With the trolley line extending in all directions, the telephone in many homes, and rural mail delivery, life in the country will soon be relieved of some of its less inviting features. Then with better roads, we shall have consolidation of schools which school will soon become the center of the social and intellectual life for the community.

Every school in the state should receive a copy of a good illustrated magazine emphasizing life in the country. For this purpose I can think of nothing better than "Country Life in America" published by Doubleday, Page & Co., New York City, and "Suburban Life", published at Harrisburg, Pa.

Too many farmers leave the hard work of the gardens to their wives and children, failing to realize what an important source of supply a good garden is. Wide awake farmers, however, will not fail to give attention to a part of the home surroundings which not only add beauty and comfort, but furnish a supply of table provisions fresh and ready at hand.

Not long since at a fruit stand, we saw on the same table among other things, apples and oranges. Two qualities of each were offered for sale, oranges two for five cents and three for ten cents, while one grade of apples sold at five cents apiece and the others, which were splendid Roman Beauties, ten cents each or three for twenty-five cents. There is certainly money in apple-growing.

Teachers who are interested in Agriculture, Forestry, Horticulture and Good Roads should write to the Department of Agriculture, Washington, D. C., for bulletins treating on these subjects. Many of these bulletins are sent free; others can be secured by the payment of a few cents. All are interesting and they will furnish a large amount of valuable information.

It is hoped that our schools will join hands in different cities and towns of the state with the Civic Improvement clubs in an effort to bring

about better sanitary conditions in homes, on the streets and in public places. The women's clubs in some of our cities have provided wire baskets as recepticals for litter of all kinds. Pupils in the schools should be taught to use these baskets and not to throw any paper, orange rind or banana peel on the streets at any time.

If the observance of Arbor Day does not lead to a cleaning up of the home grounds generally, the front yard and the garden especially, we shall feel that the spirit of the day has not been caught by that home. Not only should we plant, but we should trim and cut away as well. A garden full of weeds or a front yard grown into a thicket are almost as extreme as the yard or garden without any shrubbery or trees.

Preparation for tree-planting should be made before Arbor Day. The trees should be selected and the holes made ready so the work may be readily performed when the ceremonies take place with the school gathered about. It is not necessary to depend upon the nursery for nice shade trees. Our native maples and elms can be found almost anywhere in the woods and can be transplanted with entire safety if ordinary care is exercised.

Apple growing in West Virginia is becoming an industry of no small proportions. Thousands of acres are now devoted to the growth of this fine fruit and the car-loads of splendid Grimes Golden, Baldwins', Russets, Yorks and other varieties, are a source of income in many sections of the state that add very materially to the prosperity of the people. But there is room for the expansion of this industry, and doubtless there are young men and women in our schools today who will be led into this pleasant and profitable vocation.

A very encouraging feature of our educational progress is the interest manifested throughout the state in school libraries. The number of books in these libraries is now well up to two hundred thousand and a large proportion of these books are found in the small country school house where heretofore there has been little literature of this kind. The State Superintendent is glad to have contributed to this movement in a humble way through the library programs sent out from time to time and in suggesting books appropriate and desirable for the various gradesl





FRONT AND REAR VIEW OF THE PRIMARY ROOM OF THE PUBLIC SCHOOL AT WEST LIBERTY, OHIO COUNTY.

MISS MAUD O. CURTIS, Teacher.

It would be well if all school buildings were not more than two stories in height, the auditorium on the first floor, and never above the second, and the heating plant entirely outside the main building. The most complete buildings in the State in this respect are the Normal School building at Shepherdstown, and that of the Keyser Preparatory School. In both cases the heating plant is in a separate house at considerable distance away,—that at Keyser being over one hundred and fifty feet, thus reducing the danger from fire to a minimum.

While the Rhododendron is found in our higher altitudes and in our mountain sections, it is possible to grow it in some of our low-lands. By careful transplanting, with a good deal of root nour-ishment and wood soil, it will grow in yards and gardens. I know of a number which bloomed about homes in West Virginia last year and attracted a great deal of attention. In addition to the wild varieties of Rhododendron, many nurseries have supplies of four or five different colors which have been hybridized and acclimated. These make a fine showing when grouped in masses as they are about the State Capitol here at Charleston.

On the back cover of the Annual will be found a cut of our new State Flag. By reference to the description of said Flag found in the Joint Resolution authorizing the same, which is herein given, our readers may get some idea of the appearance of the Flag. The center is white with a blue band, fringed with old gold. The grouping of the Rhododendron in the center is a beautiful piece of handpainting in oil. Thus far only two of these Flags have been made, one for the Department of Archives and History, and one for the Department of Schools. These were both shown at the Jamestown Exposition, being first unfurled there on West Virginia Day, July 2nd, 1907.

While in many of our schools it can not be expected that much can be done in the way of starting School Gardens, nevertheless, there are many places in the state that could introduce this very excellent feature in a successful manner. In fact, it has already been done and the results are surprising. It may be, however, that the teacher can secure a little plot of ground that is enclosed and make a beginning this year, but above all, children should be encouraged to plant in their home grounds and to learn how to cultivate the differ-

ent forms of vegetation. If the teacher could distribute flower seeds among her pupils and tell them how to plant them and care for the flowers, she would be doing a good service. Sometimes business men will supply seeds to the school and, no doubt, prgressive teachers will find a way, having the will to make a beginning in this direction.

Good roads will make better schools, therefore, we are in most hearty sympathy with every effort put forth by Mr. Howard E. Williams, State Highway Inspector, who occupies the place recently provided for by legislative action. Mr. Williams is thoroughly interested in this work and will arouse the people to see the necessity of better highways. By furnishing better means of communication, good roads will add to the selling price of farm products and in every way will contribute to the comfort and happiness of the people. Then, furthermore, we can have a good system of consolidated schools only where we have good roads. I am glad to publish in the Annual Mr. Williams' excellent article, prepared at my request, on "The Problem of the Roads." It is well worth reading and considering, both from the standpoint of our material as well as our educational progress.

Some of our readers may be amused at and even criticize some of the suggestions contained in the Annual, but we think there is such an intimate connection between the vocational life of the child and the instruction in the school room, that it is not at all out of place that we emphasize the subjects of good roads, fruit growing, poultry raising, good gardens, nice home grounds, clean streets and all those conditions that indicate a thrifty and prosperous people.

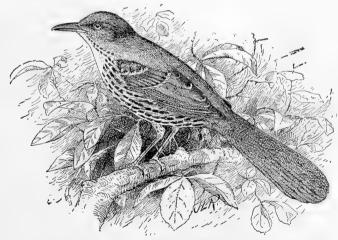
It is hoped that some manufacturing establishment may be able to get up a good printed bunting State flag that may be sold at a reasonable price to our schools. This Department has had numerous calls for the State Flag but thus far has not been able to give any definite information as to how it may be secured. However, any person can make the flag from the illustrations and description given in the Annual, and we shall hope to see it in evidence on our natal day, June 20th.

Thirty-seven years ago this spring, the writer was going home from school one evening and in passing by a house near the road, he observed some grape canes that had been cut from the vines that day and thrown over the fence. Picking up a few of them, they were taken to his boarding house and that night stuck down in the ground in the edge of the garden in good rich soil. Today one of these grape

vines near the root is nearly as large as a man's arm, and it is not an over-estimate to say that it has borne at least a ton of fruit of a most excellent quality. Every time he sees it, the writer recalls with pleasure his boyhood experience in carrying out a suggestion he had read only a short time before in the New York Tribune. With grape vines so cheap at our nurseries today, there need not be so much delay in bringing into bearing this splendid fruit. There are thousands of our hillsides that would grow grapes of most excellent quality and the wonder is that our people do not give more attention to this industry.

The pupils in our schools will doubtless appreciate the very pretty colored plates contained in the Annual, also the nice half-tones illustrative of improved school grounds, nice home surroundings, fruit growing, bird life, etc. To the respective publishing houses who have kindly allowed these cuts to be used, I am under especial obligation. Their courtesy is very much appreciated and I believe will aid in furthering the cause which their publications so faithfully present.

I am very much pleased to present a cut of the original Grimes Golden apple tree, whose fruit is now so well known throughout the



THE BROWN THRASHER.

United States and even beyond the sea. Three or four states have claimed the origin of this tree, but it has been established beyond doubt that the original tree was on the farm of Thomas Grimes in Brooke County, about three miles east of Wellsburg. There are sev-

eral persons now living who when children visited the tree, and before it was entirely decayed the photograph was taken from which the cut found in this publication was made. An enlarged picture of the tree was a prominent feature in our fruit exhibit at the Jamestown Exposition and of course it attracted a great deal of attention.

For years we have thought that West Virginia should have a Forestry agent who could at least suggest what might be done towards preserving our magnificient wooded areas in many sections of the state. We believe the next Legislature will be led to consider this matter favorably, but to arouse public sentiment, we are very glad that the West Virginia Forestry Association has been organized. As will be seen in the circular printed in this program, such an organization was effected at Morgantown in January. It is believed that this work will grow and that our people will realize that something must be done to prevent the entire destruction of many of our fine mountain forests. Of course it is natural that the woodman's ax shall make inroads among our fine timber, but the carelessness permitted in the destruction of the smaller trees and undergrowth, accompanied by forest fires are conditions that should be met in some way by legal restrictions. England and Germany have a systematic plan for the removal of timber, and the fine areas that have been re-forested there within the last hundred years are evidence of what can be done under proper regulations. Let us have a Forestry Commission in West Virginia with an agent who has authority to act.

TREE PLANTING.

THE CHOICE OF TREES.

1. General Considerations.—Trees for school grounds and yards, along roadsides and streets, must be such as are least liable to suffer from injuries; they should be compact and symmetrical in shape, free from objectionable habits, such as bad odors, root-sprouting, frequent dropping of parts, etc., and from insect pests, and, if planted for shade, should have a broad crown and a dense foliage, budding early in the spring and retaining leaves long into the fall.

Trees native to the region in which the planting is done usually have more promise of success and are generally less costly than exotics. Trees from well managed nurseries are preferable to those grown in the forest, because their root-system is better prepared for transplanting. Rapidly growing trees, although giving shade soonest, are mostly short-lived and become the soonest unsightly.

- 2. Size.—Although as a rule small plants have a better promise of success, other considerations recommend the choice of larger sizes for roadside and ornamental planting. Trees of any size can be successfully transplanted, but in proportion to the size grows the difficulty, the amount of work, and the care necessary. As a rule the largest size should not exceed 2 to 3 inches in diameter at the base and 10 to 15 feet in height. Those one half that size will probably make better growth, because less of their root-system will be curtailed in taking them up for transplanting.
- 3. Diagnosis of a tree suitable for transplanting:—a. An abundance of fibrous roots.
- b. A normal form and well proportioned development of shaft and crown.
- c. The position from which the tree came has some influence on its further development. Trees from the forest have generally a wide spreading root system, which is difficult to take up and tranplant. Those which have grown in the shade of the forest as a rule do not start easily in the open sunlight; those from cool north sides are apt to sicken when placed on hot exposures, and vice versa. A healthy tree from poor soil transferred into better conditions will show itself grateful by vigorous development.—*Arbor Day Planting in Eastern States.

HOW TO PLANT THEM.

Few people know how to plant a tree. Transplanting is an artificial process, requiring both knowledge and care. If there is a skilled tree planter in the neighborhood, interest him in Arbor Day, take his advice about the better trees to plant first and their location, and get him to see that roots and branches are properly pruned, that the holes are of proper size and depth, that the soil is filled in around the roots as it should be, and that the tree is properly protected. If he will let the older pupils assist him in doing the actual work, and afterward talk to them in a simple, direct way about the care of the trees, so much the better. Be sure to give him the opportunity.—Alfred Bayliss, in Illinois Arbor Day Circular, 1899.

SPECIAL RULES.

The time for transplanting trees varies with the locality and the season. Trees should be moved before they have budded and blossomed, for after the leaves have opened they cannot obtain sufficient nourishment from the newly planted roots, and after sapping the life from the tree, wither and die.

* Circular No. 5, Forestry Division, U. S. Dept. of Agriculture.

Copies of this circular in limited numbers may be had by application to the Department of Agriculture, Washington.

PLANTING SUGGESTIONS

By Gifford Pinchot, U. S. Forester, Washington, D. C.

The proper season for planting is not everywhere the same. Where spring is the best season—north of the thirty-seventh parallel generally—the right time is when the frost is out of the ground and before budding begins.

The day to plant is almost as important as the season. Sunny, windy weather is to be avoided; cool, damp days are the best. For this reason it is well to leave the date for Arbor Day unfixed. All exercises are better deferred until the planting is done.

Trees can not be thrust into a rough soil at random and then be expected to flourish. They should be planted in well-worked soil, well enriched. If the trees can not be set out immediately after being secured, the first step is to prevent their roots drying out in the air. This may be done by standing the roots in a "puddle" of mud or "heeling-in" the trees by burying the roots deep in fresh earth.

In planting they should be placed from two to three inches deeper than they stood originally. Fine soil should always be pressed firm-Iy—not made hard— about the roots, and two inches of soil at the top should be left very loose, to act as a mulch to retain the moisture.

Small seedlings may be secured easily and cheaply. If these are set out in good numbers after the pattern of a commercial plantation they will become in due time a true forest on a small scale. No matter how few the trees, they may be made to illustrate planting for some useful purpose.

The scope of planting may sometimes be broadened by securing permission for the children to plant a small block of trees in some field unsuited for crops, and in this way the work can be done just as it would be done on a larger scale by the forester.

Outside the scope of the actual planting, it is well to bear in mind that Arbor Day is not the only day in the year on which trees deserve to be remembered and cared for. They need care throughout the season. Watching the plantation thrive under right treatment greatly adds to the educational value of the work, and to its success, which should be its best lesson.

It is all important that the plantation should serve as a model of what can be accomplished along these lines. Then, when the children are grown men and women, they will find great satisfaction in the work of their school days.

PLANT FRUIT TREES.

In many European countries it has been the custom for centuries to plant a choice nut tree in commemoration of the birth of a child, and often this is repeated on each succeeding birthday. The results of such a practice are partly seen in the millions of bushels of these nuts produced in those countries for home use and export. This country alone imports annually over twenty millions of pounds of these foreign growing nuts. With these facts staring us in the face, we may well ask, why should our roadsides be encumbered and shaded with trees yielding nothing in the way of food for either man or beast? when it would be just as feasible to plant choice nut trees, which would soon give their owners a crop that could be sold in the markets of any city or village, besides making the highways "pleasant ways" and especially for the small boy and his sister, who are always blessed with a good appetite, on their way home from school.

It has been suggested, that at least one choice nut tree be planted on next Arbor day in the school grounds of every district in this state. At the same time it should be impressed upon the minds of the children, and every person present that these, if properly guarded and cared for, will remain living, and fruitful memorials of their kindness and forethought for many decades, and perhaps for many centuries.

Fruit trees along the highways in Belgium made a return of two millions of dollars (\$2,000,000) or the year 1898.

We will try to make some small piece of ground beautiful, peaceful and fruitful. We will have no untended or unthought-of creatures upon it. We will have flowers and vegetables in our gardens, plenty of corn and grass in our fields. We will have some music and poetry; the children shall learn to dance and sing it; perhaps some of the old people, in time, may also. We will have some art; and little by little some higher art and imagination may manifest themselves among us—nay—even perhaps an uncalculating and uncovetous wisdom, as of rude Magi, presenting gifts of gold and frankincense.—Ruskin.

FACTS ABOUT TREES FOR THE LITTLE ONES. (A RECITATION.)

1. Cutting down trees spoils the beauty of the landscape. I would not like to live where there were no trees.

- 2. There are few birds where there are no trees. They have no place to make their homes.
- 3. Taking away the trees takes away the protection from our tender fruit trees.
- 4. Where there are no trees the snows melt and go off too rapidly; the moisture that should sink into the soil is carried away in the floods.
- 5. Because our forests are taken away we have severe droughts every year.
- 6. One full grown elm tree gives out fifteen tons of moisture in twenty-four hours. A large sunflower plant gives off three pints of water in one day.
- 7. The trees give us lumber, fuel, wood, pulp for newspapers, cork, bark for tanning, wild fruits, nuts, resin, turpentine oils and various products for medicines.
- 8. We should have greater extremes of heat and cold if it were not for the trees and forests.
- 9. The leaves of trees catch the rain and hold it a little while; then they drop the water a little at a time; this is better for the ground.
- 10. The old leaves make a deep sponge carpet in the woods and this keeps the ground from freezing. If the earth does not freeze it takes up the rain better.
- 11. We might have dangerous floods if we did not have trees. The trunks and roots of trees stop the water that comes pouring down the hillside.
- 12. I will be very careful not to hurt any tree, but will call every tree my friend.—Primary Education.

SPRAYING TREES AND PLANTS.

Large or small, every place that attempts to grow plants should have a spraying outfit. For a few plants of small stature, a bucket-pump or a knapsack outfit is all that is necessary. For a place of an acre or more, or to reach the tops of trees, a strong lever-handle force-pump is to be advised. There are many good pumps. Look up the advertisements in the agricultural papers and send for circulars. People ask what is the best pump and best nozzle. There is no answer to this question. What is best for one may not be best for another. What is the best wagon?

For fungi (plant disease) Bordeaux mixture is the standard mater-



THE ORIGINAL GRIMES GOLDEN APPLE TREE.

The Famous West Virginia Seedling Originated on the Farm of Thomas
Grimes, Brooke County.



SPRAYING FRUIT TREES.
Courtesy of B. F. Johnson Publishing Co., Richmond, Va.





BALTIMORE ORIOLE

(Upper Figure, Male; Lower Figure, Female)

Order—Passeres Cenus—Icterus Family—ICTERIDÆ
Species—GALBULA



ial to be sprayed on the plants. It is a compound of blue vitriol, lime and water. Ask your experiment station for a bulletin giving directions for making it, and when to apply. If you are expecting mildew or leaf-blight, spray before the disease appears. Spray until the tree is covered, even if it is blue. For insects, Paris green and the kerosene emulsions are standard materials. Paris green or other arsenites are used for all biting or chewing insects, as potato bugs, apple worms, caterpillars. For scale insects and aphis, spray with kerosene compounds.—Country Life in America.

THE WOODS.

The woods at first convey the impression of profound repose, and yet, if you watch their ways with open ear, you find the life which is in them is restless and nervous as that of a woman; the little twigs are crossing and twining and separating like slender fingers that can not be still, the stray leaf is to be flattened into its place like a truant curl; the limbs sway and twist, impatient of their constrained attitude; and the rounded masses of foliage swell upward and subside from time to time with long soft sighs, and, it may be, the falling of a few rain-drops which had lain hidden among the deeper shadows.—Oliver Wendell Holmes.

THE SPRING TIME.

I love to trace the break of Spring step by step. I love even those long rain-storms, that sap the icy fortunes of the lingering winter,—that melt the snows upon the hills, and swell the mountain brooks.

I love the gentle thaws that you can trace, day by day, by the stained snow-banks, shrinking from the grass; and by the quiet drip of the cottage eaves. I love to search out the sunny slopes under some northern shelter when the reflected sun does double duty to the earth, and when the first Hepaticas, or the faint blush of the Arbutus, in the midst of the bleak March atmosphere, will touch your heart, like a hope of Heaven in a field of graves. Later come those soft, smoky days, when the patches of winter grain show green under the shelter of leafless woods, and the last snow drifts reduced to shrunken skeletons of ice, lie upon the slope of northern hills, leaking away their life. Then the grass at your door grows into the color of the sprouting grain, and the buds upon the lilacs swell and burst. The old elms throw down their thin dingy flowers, and color their spray with green; and the brooks when you throw your worm or the minnow

float down whole fleets of the crimsoning blossoms of the maple. Finally the oaks step into the opening quadrille of spring, with grayish tufts of a modest verdure, which by and by will be long and glossy leaves.—Ike Marvel.

From "Dream Life."

THE OAK TREE.

A gentleman once stood before an oak tree pondering deeply. Nine miles from the coast of Cornwall lay some dangerous rocks on which many a brave ship had been wrecked. Twice a lighthouse had been erected upon them, and twice destroyed. On what plan could he build a new one, which should stand firm through storm and tempest? The oak tree stands for hundreds of years; branch after branch may be broken off, but the trunk remains firm. Many others are torn up by the roots, but never the oak. Mr. Smeaton wondered if it was the peculiar shape, the broad base and curving waist, that made this tree so strong. He went away, and in 1759 the new Eddystone Lighthouse was built, broad at the base and sloping upwards like the trunk of the oak tree; and it stands firm to this day.—

Mrs. Dyson.

THE PINE TREE.

The tremendous unity of the pine absorbs and moulds the life of a race. The pine shadows rest upon a nation. The northern peoples, century after century, lived under one or other of the two great powers of the pine and the sea, both infinite. They dwelt amidst the forests as they wandered on the waves, and saw no end nor any other horizon. Still the dark, green trees, or the dark, green waters, jagged the dawn with their fringe, or their foam. And whatever elements of imagination, or of warrior strength, or of domestic justice, were brought down by the Norwegian or the Goth, against the dissoluteness or degradation of the south of Europe, were taught them under the green roofs and wild penetralia of the pine.—John Ruskin.

COMMON NAMES OF TREES FOUND IN WEST VIRGINIA.

Compiled from reports on the forests of North America by Charles S. Sargent, special agent of tenth census.

('ucumber tree, Tulip, or Yellow Poplar, Linden, Basswood, or Lime tree, Whitewood, Prickly Ash, Sweet Ash, Broad-leaved Maple, Striped Maple, Sugar Maple, Black Sugar Maple, Soft, or Silver Maple, Red or

Swamp Maple, Box Alder or Ash-leaved Maple, Black Locust, Honey Locust, Red Bud or Judas tree, Wild Black Cherry, Sweet-scented Crab, Black Thorn, June Berry or Service tree, Sweet or Red Gum, Black or Sour Gum, Alder, Persimmon, Red Ash, Green Ash, Blue Ash, Black Ash, Sassafras, Rock Elm, Sycamore, Butternut or White Walnut, Black Walnut, Pecan Hickory, Shell Bark Hickory, Big Shell Bark Hickory, Mocker Nut, Black Hickory, Pignut, Butternut, Red or Black Oak, Scarlet Oak, Fish Oak, Beech, Ironwood, Birch, Willow, Sand Bar Willow, Aspen or Quaking Ash, Poplar, River Cottonwood, Balsam, Balm of Gilead, White or Post Cedar, Arbor Vita, Red Cedar, White Pine, Black Spruce.

STATE FLOWERS.

Golden Rod

Alabama	Golden Rod.
Arkansas	Apple Blossom.
California	Eschscholzia.
Colorado	Columbine.
Delaware	Peach Blossom.
Illinois	Rose.
Indiana	Corn.
Iowa	Wild Rose.
Kansas	Sunflower.
Kentucky	Golden Rod.
Louisiana	Magnolia.
Maryland	Golden Rod.
Michigan	Apple Blossom.
Mississippi	Magnolia.
Minnesota	Moccasin.
Missouri	Golden Rod.
Nebraska	Golden Rod.
New York	Rose.
North Dakota	Wild Rose.
Ohio	Scarlet Carnation.
Oregon	Oregon Grape.
Pennsylvania	Golden Rod.
Rhode Island	
South Dakota	Pasque.
Texas	Blue Bonnet.
Utah	Sego Lily.
Vermont	
Washington	Rhododendron.
West Virginia	

"TOWN CLEANING DAY".

Recently one of the Pittsburg teachers spoke of Arbor Day as Town Cleaning Day, and said that if nothing more were done than removing the rubbish from the streets and yards, this alone would justify the time and attention given to the subject. Why not then on April 10th have a general cleaning up all over West Virginia? The piles of old boxes and barrels, tons of waste paper, thousands of tin cans and other rubbish do not make an attractive picture for the eye as one travels around over the State and observes this "matter out of place". Get our boys and girls interested in this movement and the effect will soon be noticeable. Moreover, sanitary conditions would be very much improved and an upward tendency would show itself everywhere.

Elementary Agriculture was added to the course of study for our public schools by the Legislature at the recent special session, and while teachers are not now required to pass examination on this subject, it is natural to conclude that in a few years such requirement will be made.

An edition of the new School Law will be issued as soon as it can be put through the press. However the Revision does not go into effect until May 30th. It would be well for all teachers and school officers to inform themselves as to the new provisions as soon as possible.

He who makes two blades of grass grow where only one grew before, is worth more than this whole race of politicians.—Adam Smith.

While Agriculture is not one of the branches upon which teachers are now required to pass examination, still I shall include it in the course prescribed for the Teachers' Reading Circle which is now fully recognized by law.

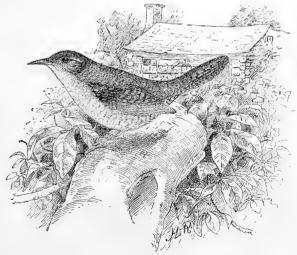
The terrible disaster near Cleveland, Ohio, in which 175 children were burned to death, is an object lesson that is being heeded all over the country. School buildings are being examined, fire escapes are being provided, children are being disciplined in fire drills and a great awakening on this subject is noticeable everywhere. Too much care can not be exercised when human life is at stake. It is

hoped that all school buildings in West Virginia will be properly provided with fire escapes, that doors shall always open outwards, and that in no case shall small children be allowed above a second story, and better still if all are kept on the first.

At a meeting of the Monongahela Valley Round Table held at Grafton on March 7th, the following resolutions submitted by a committee composed of Dr. C. J. C. Bennett of Fairmont, Dr. Waitman Barbe, of Morgantown, and Prof. W. A. Beer, of Clarksburg, were unanimously adopted:

"The news of the destruction by fire of a school building at Collinwood, Ohio, in which almost two hundred little children perished, arrests our attention. The details of the awful occurrence impress us with the ignorance and shortsightedness shown in the construction of many school buildings and in the lack of safe-guarding the pupils against fire; and while we thus publicly express our deepest sympathies for the fathers and mothers who have lost their dear ones in the fire at Collinwood, we also wish to arouse public interest in the safety of pupils everywhere; therefore, be it

Resolved, That we, the members of the Monongahela Valley Round Table, henceforth continually urge upon our school authorities the necessity of greater care for the safety of the school children, to the end that every school building of our State be examined and improved in reference to fire escapes, stairways and exits and the observance of fire drills."



THE HOUSE WREN.

THE WORK OF THE SCHOOL IMPROVEMENT LEAGUE.

By Miss Ethel Carle, Secretary.

Our West Virginia School Improvement League is now nearly four years old and, considering its exceedingly informal methods and lack of definite organization, it has produced really remarkable results in many counties of our state, if I may judge from the letters and reports which have come to me from the county secretaries and from individuals. I regret now that we have not had a more uniform system of making these reports so that I might have kept a tabulated record of work done, which it has been impossible for me to do under the present arrangement. However, I do know that much good has been accomplished.

The chief reason why the movement has made such rapid progress with so little organized effort on the part of the state officers is because there has been a great awakening everywhere on the subject of "Civic Improvement" as it is sometimes called. The Ladies Home Journal and other popular magazines have taken up the subject and on all sides we hear of "Beautiful America Clubs" and "Civic Improvement Clubs" and "Village Improvement Societies" as well as "School Improvement Leagues". The central idea of all these organizations is to secure more attractive surroundings for home, school, and town. The very spirit of "improvement" is in the air and hundreds of West Virginia teachers have caught it. Those who have read from time to time the reports which have appeared in the West Virginia School Journal concerning work done by West Virginia teachers will agree with me that we have great reason to rejoice over the things already accomplished as well as the future prospects of our School Improvement League. School grounds have been cleaned up, shrubs and trees have been planted, school houses have been painted, fences built, libraries and pictures purchased, and many other improvements have been made through the efforts of earnest, energetic teachers working with their boys and girls. May the good work go on until every school house in the state shall be -as it should be-the model for the whole community in matters of cleanliness and beauty, inside and out.

I give below a list of books and pamphlets any of which will be found helpful in this work. In selecting books for school libraries at least one or two of these should be included:

[&]quot;Among Country Schools"-by O. J. Kern (Ginn & Co.).... \$1.00

"Children's Gardens"—by Mrs. Evelyn Cecil. (Macmillan Co. N.
Y.) \$1.23
"Home Acre"—By E. P. Roe (Dodd Mead and Co., N. Y.)62
"The Garden, You and I"-By Mrs. M. O. Wright (Macmillan Co.
N. Y.)
"Our Mountain Garden"—By Mrs. R. F. Thomas (Macmillan Co.
N. Y.) 1.35
The following pamphlets from The American Civic Association,
Philadelphia:
"Children's Gardens"—By Dick J. Crosby
"Play and Play Grounds"—By Joseph Lee
"School Gardens and Their Relation to Other School Work"-By
Baldwin25
"Suggestions for Beautifying Home Village and Roadway"-By
W. H. Manning
"Uses of an Improvement Society"1c. each
"Arbor Day Program"1c. each
'Good Roads"—By O. C. Simonds
Mannington, W. Va., March 10, 1908.

WEST VIRGINIA FORESTRY ASSOCIATION.

Prof. T. C. Atkeson, President. Prof. A. W. Nolan, Secretary.

At a meeting of the Pomona Grange No. 2, on January 24th. 1908, at the State University, resolutions were offered, looking to the organization of a West Virginia Forestry Association. A few days later a permanent organization was effected, choosing Prof. T. C. Atkeson as President, and Prof. A. W. Nolan as Secretary. The following Vice-Presidents were elected, one from each congressional district: Wm. H. Hearne, 1st, Jas. H. Stewart, 2nd. R. E. Thrasher, 3rd, H. A. Woodward, 4th, and James George, 5th.

Constitution and by-laws, stating fully the plans and purposes of the Association were adopted, and the charter-membership as enrolled constituted representatives from twenty-three counties of the State, members of the University faculty, and of the Experiment Station staff.

The objects for which the association stands, as stated in the constitution are as follows:

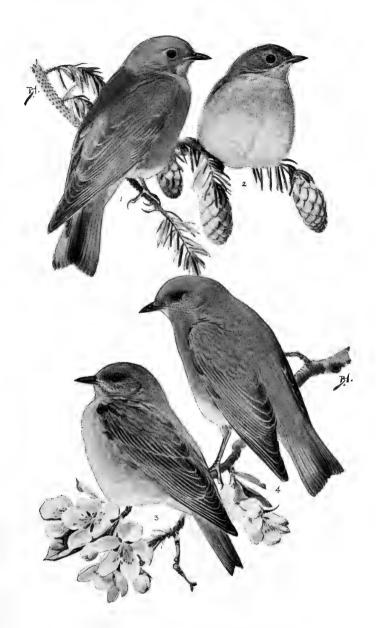
To stand for the conservation of our forest resources.

- 2. To bring about better state laws for conserving and utilizing our forests.
- 3. To take steps toward reforesting denuded lands, and the exempting of woodlands from taxation.
- 4. To encourage tree planting by rural and urban communities, especially the planting of useful trees along the country highways.
- 5. To educate the young to a higher appreciation of the economic as well as the esthetic value of trees.
- 6. To encourage the observance by adults as well as by school children, of Arbor Day, as one of the greatest and happiest of our holidays.
- 7. To unite in one popular and agressive organization, all persons who desire these objects, that the force of their numbers may be effective in securing forestry legislation, in creating and crystallizing public opinion, and in diffusing among the people proper forestry knowledge.

There is no fee attached to membership, and every person in the State, who is interested in the objects and purposes of this association, is urged to send his name to the secretary, and get in touch with this important movement.

Mr. A. W. Nolan, the secretary, has recently been appointed professor in charge of the new Department of Forestry in the State University, and he is ready to co-operate with all persons and organizations, who are interested in the forestry movement. The instructional work in the University is offered in Economics of Forestry, Silviculture, Forest Mensuration and Management, and the courses give thorough training in Farm Forestry as well as excellent preparation for the more technical courses.

President T. C. Atkeson has appointed committees on Legislation. Civic Relations, Arbor Day, Forest Reserves, Program, also an expert Forester, Botanist, Entomologist, Zoologist, Geologist, Ornithologist and Chemist. With this strong array of workmen in the organization, something constructive in forestry in West Virginia may be hoped for. The Association appeals to the public spirited citizens and press of the state, for their continued interest and manifested sympathy, as a foundation upon which to build a permanent State Forestry policy. The duty that lies next is to petition Congress to pass the Appalachian Reserve Law.



UPPER FIGURES-CHESTNUT-BACKED BLUEBIRD

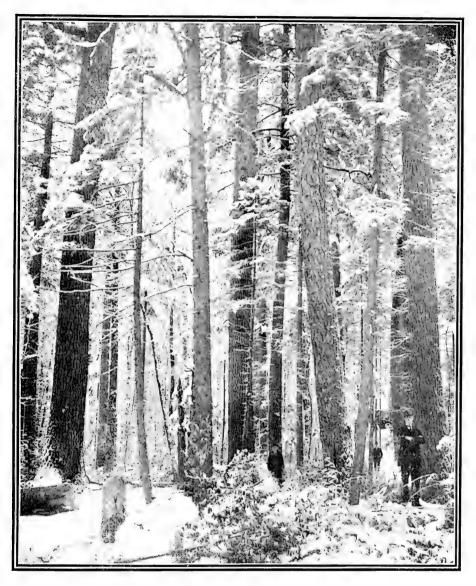
Order—Passeres Family—Turdidæ
Genus—Sialia Species—Mexicana

Subspecies-Bairdi

LOWER FIGURES-BLUEBIRDS

Order—Passeres Family—Turdidæ Genus—Sialia Species—Sialis





A SPRUCE FOREST IN RANDOLPH COUNTY.

Of course our fine timber is very valuable and in great demand, and while much of it will necessarily be removed, the destruction would not be so great if the smaller trees and undergrowth could be preserved and forest fires prevented. It is hoped that the West Virginia Forestry Association, recently organized, will put forth efforts that will save some of our fine timber areas, and that provision may be made for re-foresting some of our denuded regions. Is it too much to expect that West Virginia may soon have a Forestry Commission with authority not only to suggest, but to act in behalf of the preservation of our magnificent forest areas in the Appalachian water-shed?



FORESTRY AND ARBOR DAY.

By A. W. Nolan, Secretary Forestry Association.

The true message of Arbor Day is that the forest is the producer and custodian of the necessaries of life and happiness. All the teachings of forestry aim to put this idea into practice, and since the public schools reach so many people, especially the young people who are so open-minded to the truths of life and nature, it is highly important that the message of Arbor Day should come to every school in the land. Thus Arbor Day is the time to bring home to the children, through the principles of nature-study, the simplest and most important truths of forestry. In the planting of trees on Arbor Day a great opportunity has been lost, if reference to the commercial



REDWINGED BLACKBIRD.

utility and protective value of forests, is omitted. It cannot be hoped that the great mass of children taking part in Arbor Day exercises, may ever contribute much to the solution of the larger problems of forestry, but before the ideals of forestry can be worked out successfully in this country, public opinion, and sane forestry sentiment must be created and crystallized into a national policy, and this result an intelligent observance of Arbor Day may help to bring about. One ideal for which forestry stands, however, may be helped to realization by Arbor Day celebrations, and that is, that the home grounds, the school grounds, the roadsides, and all public as well as private grounds, may be beautified by trees. The important thing

is, that out of the sentiments and emotions of Arbor Day, permanent results be left,—lasting impressions in the minds of the children, of the use and beauty of tree life.

The objects of this National Society, as stated in the constitution, are: (1) to promote critical investigation of all phases of nature-study. (as distinguished from technical science) in schools, especially all studies of nature in elementary schools; and (2) to work for the establishment in schools of such nature-study as has been demonstrated valuable and practical for elementary education.

The established principles to guide in the teaching of naturestudy are as follows:

First. Nature-study is a direct observational study of the common things and processes of nature from the standpoint of our human interests in nature as it touches our daily life directly.

Second. Nature-study should be differentiated from science, in its strictly technical sense.

Third. The aims of nature-study may be stated thus: (a) to give general acquaintance with and interest in common objects and processes of nature, (b) to give the first training in accurate observing, as means of gaining knowledge direct from nature, (c) to give pupils useful knowledge concerning natural objects and processes as they directly affect human life and interests.

Fourth. The one fundamental method of teaching nature-study consists in getting the pupil to see and think for himself. True nature-study cannot be primarily book study.

Fifth. In choosing the material, select the most common and the most interesting from the view-point of every day life.

Sixth. Nature-study must be adapted for the child, and not for adults.

With these six principles to guide, the intelligent teacher cannot fail to do good teaching in nature-study. The following synopsis of a course of study is recommended. The idea is not so much the addition of a new study as the enrichment of the older branches.

GRADES 1 AND 2.

The main object of nature-study in these grades is to give general acquaintance, and arouse interest in the common things of their life—birds, trees, insects, flowers, pets, etc. A study of pets is eycellent for this grade. How the pets care for themselves. Why we are interested in the pets. How we may care for them. Growing of plants is a fine topic. The garden habit is a splendid one for children to form.

This will be all the Elementary Agriculture needed in these grades.

GRADE 3.

Nature-study, Home Geography, and Elementary Agriculture should be the same subject in this grade. Such topics as the following are suitable: homes, streets, land surfaces, drainage, transportation, the dominant industry, and the geographic condition favoring. the relation to home, fruits, harvesting and preserving, materials used in home-building, sources of water in city and country, washing of soil, weather observations, simple hygiene of the home, etc.

GRADE 4.

This work should accompany the industrial work of the Elementary Geography. Lumbering, mining, fishing, farming, grazing, etc. all furnish topics excellent for nature-study and Elementary Agriculture. When these topics are studied in accordance with the above named principles, they are sufficient for the work of nature-study and Agriculture of this grade.

GRADE 5.

In this grade may be begun a more intensive study of nature topics, and a text may be used if a suitable one can be found. The following topics are suitable: Trees. Roth's First Book of Forestry, is a valuable aid to the teacher here. Birds. Give general acquaintance with form, habit and habitat. Teach common names, economic values, bird protection, etc. Note-book keeping is a good thing to begin in this grade. The main aim is to arouse permanent interest, so that the boy and girl may become good citizens, able and willing to do effective work in these lines for the community. Insects, toads, and their relations to human interests. Garden work. Use of tools. Many topics of Elementary Agriculture may be taken up in this course. At least one period a week should be given to this work.

GRADE 6.

In this grade all the topics of the preceding grade are appropriate, and in addition, work in physical nature-study may be given, correlated in many cases with the Geography. Such topics as these are good:

Atmosphere, heat, temperature and moisture of the air, light and

electricity, etc. Avoid the generalizations of science. Woodhull's School-room Experiments, will give valuable help to the teacher in this work.

GRADES 7 AND 8.

In these grades in the ordinary school it will be best perhaps to give much of the geography in the spirit of nature-study, and begin a text in Elementary Agriculture. The work may be given on alternating days with the Geography. One of the best texts for these grades would be Bailey's Principles of Agriculture.

It is not the purpose of Elementary Agriculture to train all to be farmers, but to give to all an intelligent and sympathetic attitude to this most important of industries, and to establish a closer and more harmonious relation between nature and the life of the people.

Much interest has been awakened by the establishment of the Sage Foundation fund for the investigation of the causes of poverty in this country. What larger and more widely disseminated causes of poverty can we hope to discover than our tax for preventable disease, our bills for patent medicines, our tax for insect damages, our forest product famine, and the devastating floods and fires on account of national ignorance of forestry, our ruinous soil impoverishment, our wanton destruction of bird life, and many other drains on our national prosperity equally unnecessary. Here are problems which lie close to the life of the child and the home, problems of wholesome homes and clean living, problems of birds and insects, gardens, fields and woods and pure water. These are problems which meet the criterion of human interests which it must be the function of the system of public education to begin to solve. May naturestudy and Elementary Agriculture be the means of hastening and establishing the good work.

NATURE-STUDY AND ELEMENTARY AGRICULTURE.

It is very important at this time in our State, since Elementary Agriculture is to become a part of the curriculum of the common schools, to consider the principles that shall guide us in teaching this subject. Are we to introduce an entirely new subject, or are we to adapt and modify the old to present day needs? What is the relation of Elementary Agriculture to Nature-Study? What is nature-study? These are questions that we must answer now.

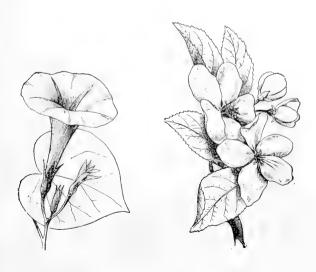
There seems to be a strong popular impression that each advocate of nature-study is a law unto himself, and that nature-study is a fad, unorganized and indefinite. Fortunately for the schools, and teachers the best thinkers in Elementary Education and the leading experts in science, have agreed that there are established principles of nature-study, and as a result of this agreement, there has been very recently organized, the American Nature-Study Society. We shall turn with interest to the proceedings and recommendations of this society.

The following well-known men are the officers of this new society, and their names should give authority to what is to be herein recommended:

(The official publication of the Society is The Nature-Study Review, Teachers' College, N. Y. City.)

President, L. H. Bailey, Cornell University; Secretary-Treasurer, M. A. Bigelow, Teachers' College, Columbia; Vice-Presidents, C. F. Hodge, Clark University; F. L. Stevens, V. L. Kellog, W. Lochhead, and F. L. Charles.

Directors: D. J. Crosby, C. R. Mann, S. Coulter, H. W. Fairbanks, M. F. Guyer, O. W. Caldwell, G. F. Trafton, F. L. Clements, Ruth Marshall and E. R. Downing.



SOME OF THE MORE COMMON BIRDS FOUND IN WEST VIRGINIA.

Wood Thrush, Robin, Meckingbird, Catbird, Bluebird, Tufted Titmouse, Carolina Chicadee, Brown Creeper, House Wren, Winter Wren, American Titlark, Nashville Warbler, Summer Yellow Lird, Small Billed Water Thrush, Kentucky Warbler, American Redstart, Warbling Virco, Cedar Wax-wing, Purple Martin, Cliff Swallow, Barn Swallow, Summer Redbird, Pine Grosbeak, Purple Finch, English Sparrow, Lark Finch, Field Sparrow, Chewink, Indigo Bunting, Bobolink, Cowbird, Meadow Lark, Orchard Oriole, American Raven, Common Crow, Blue Jay, Pewee, Chimney Swift, Whippoorwill, Nighthawk, Hairy Woodpecker, Belted Kingfisher, American Barn Owl, Little Screech Owl, Pigeon Hawk, Golden Eagle, Mourning Dove, Wild Turkey, American Quail, Kildeer, American Woodcock, Robin, Snipe, Yellow Legs, Virginia Rail, American Coot, Whooping Crane, Snow Goose, Mallard, Pintail, Wood Duck, Canvas Back, Double Breasted Cormorant, White Winged Gull, Black Tern, Horned Grebe, Loon, Redthroated Diver, Wood Ibis, Fish Hawk, Bald Eagle, Black Snow Bird, Prairie Warbler, American Crossbill, Grass Finch, Least Flycatcher.

OUR STATE LAW FOR THE PROTECTION OF THE BIRDS.

As a matter of interest as well as information to the pupils of our schools and the people of the State generally, I have pleasure in publishing herewith Senate Bill No. 116, introduced by Mr. Hazlett of Wheeling, and passed at the session of the Legislature in 1907.

An Act for the protection of birds, and their nests and eggs. Be it enacted by the Legislature of West Virginia:

Sec. 1. That all wild birds, both resident and migratory, in this state, shall be, and are hereby declared to be the property of the state.

Sec. 2. That no person shall, within the state of West Virginia, kill or eatch or have in his or her possession, living or dead, any wild bird other than a game bird, or purchase, offer or expose for sale, transport or ship within or without the state, any such wild bird after it it has been killed or caught, except as permitted by this act. No part of the plumage, skin, or body of any bird protected by this section shall be sold or had in possession for sale, irrespective of whether said bird was captured or killed within or without the state.

For the purpose of this act the following only shall be considered game birds: The anatidæ, commonly known as swans, geese, brant, and river and sea ducks; the rillidæ, commonly known as rails, coots, mud-hens and gallimules; the limicolæ, commonly known as shore birds, plovers, surf birds, snipe, woodcocks, sand pipers, tatlers, and curlews; the gallinæ, commonly known as wild turkeys, grouse, prairie chickens, pheasants, partridges, and quails. All other species of wild birds, either resident or migratory, shall be considered non-game birds.

- See. 3. That no person shall, within the state of West Virginia take or needlessly destroy or attempt to take or destroy the nest or the eggs of any wild bird other than a game bird, or have such nest or eggs in his or her possession, except as permitted by this act.
- Sec. 4. That no person or persons or any corporation acting as a common carrier, its officers, agents or servants, shall ship, carry, take or transport, either within or beyond the confines of the state any resident or migratory wild non-game bird, except as permitted by this act.
- Sec. 5. That any person who violates any of the provisions of this act shall be guilty of a misdemeanor, and shall be liable to a fine of five dollars for each offense, and an additional fine of five dollars for each bird, living or dead, or part of bird, or nest, or set of eggs, or part thereof, possessed in violation of this act, or to imprisonment for thirty days, or both, at the discretion of the court.
- Sec. 6. That sections 2, 3, 4 and 5 of this act shall not apply to any person holding a certificate giving the right to take birds, their nests, or eggs for scientific purposes only, as provided for in section 7 of this act.
- Sec. 7. That certificates may be granted to any properly accredited person of the age of fifteen years or upward, permitting the holder thereof to collect birds, their nests, or eggs for scientific purposes only. The applicant for same must present to said officer written testimonials from two well known ornithologists who must be residents of West Virginia, certifying to the good character, and fitness of said applicant to be intrusted with such privilege; must pay said officer one dollar to defray the necessary expenses attending the granting of such certificate. On proof that the holder of such certificate has killed any bird, or taken the nest or eggs of any bird for other than strictly scientific purposes, his certificate shall become void, and he shall be liable to a fine of one hundred dollars or imprisonment of thirty days, or both, at the discretion of the court.

- Sec. 8. The certificates authorized by section 7 of this act shall expire on the 31st day of December of the year issued, and shall not be transferable.
- Sec. 9. That the English or European house sparrow, great horned owl, sharp shinned hawk and cooper's hawk, are not included among the birds protected by this acc.
- Sec. 10. That nothing in this act shall prevent a citizen of West Virginia from taking or keeping any wild non-game bird in a cage as a domestic pet, provided that such bird shall not be sold, or exchanged, or offered for sale or exchange, or transported out of this state.
- Sec. 11. All other acts or parts of acts in conflict with this act are hereby repealed.

NATIONAL ASSOCIATION OF AUDUBON SOCIETIES.

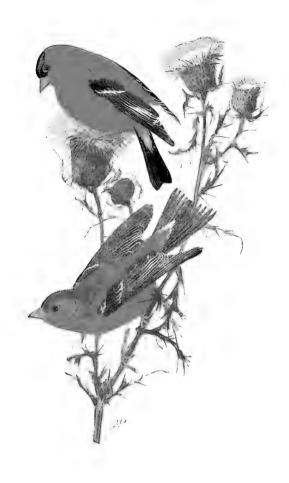
A School Audubon Bird Club—How to Organize. $By\ Gilbert\ H.\ Trafton.$

One way of developing interest in the study and protection of birds among children is by the formation of bird clubs, officered and carried on by the children under the guidance of a teacher. In this way a feeling of responsibility will be developed and the children may be changed from indifferent friends, or even persecutors of birds, to their ardent protectors.

The Promoter. The work of organizing the club and of guiding its activities must be under the close supervision of some teacher who is concerned in the study and protection of birds and who has a desire to interest and instruct the children.

Preliminaries. Announcement should be made that a meeting is to be held to organize a Bird Club, naming the time and place, and it may be well to have this announcement made by the principal of the school. The co-operation of all the teachers should be sought that they may talk with their children and seek to interest them in the organization of the club. Some copies of the educational leaflets published by the National Association of Audubon Societies may be obtained free for distribution at the first meeting, on request.

First Meeting. In order that the children may realize that the formation of a Bird Club is something really worth while and worthy



AMERICAN GOLDFINCH
UPPER FIGURE, Male: Lower FIGURE, FEMALE
(One-half natural size)





THE BALTIMORE ORIOLE.
Courtesy Houghton, Mifflin & Co., Boston.



of the effort, the teacher should explain at the opening of the meeting something about the value of birds and the pleasure that may be derived from studying them.

A temporary chairman and secretary should be chosen. To simplify matters it will be well for the teacher to nominate these, explaining to the children that they are to serve only till the Club elects its permanent officers.

The two following resolutions should then be presented and regularly seconded and adopted, arrangements having been made beforehand with two children to read these resolutions.

Resolved. That the temporary chairman shall appoint a committee of five, which shall include himself and the secretary, to prepare and present a constitution for consideration and adoption by the Club at an adjourned meeting.

Resolved, That a committee of three shall be appointed by the temporary chairman to nominate permanent officers. (The teacher should explain the method by which resolutions are presented, seconded and adopted).

The meeting is then adjourned till the committees are prepared to report, at which time another meeting is called by the temporary chairman.

These committees should be called together by the teacher, who should direct their work.

Second Meeting. The committee on constitution should first report, and the constitution should be discussed and adopted section by section.

The committee to nominate officers should report next and the permanent officers should be elected.

The following outline is suggested for a constitution which may be modified as each club desires.

CONSTITUTION OF THE AUDUBON BIRD CLUB OF SCHOOL,

ARTICLE I. NAME.

The name of this organization shall be The Audubon Bird Club of School.

ARTICLE II. OBJECTS.

The objects for which this Club is formed are: (1) to study the birds; (2) to protect the birds; (3) to attract birds around our school,

In our parks and about our homes; (4) to observe with suitable ceremonies some day in spring to be known as Bird and Arbor Day; (5) to acquire a library of nature books, a lantern and colored slides of birds; (6) to plant trees and shrubs in school grounds and along highways.

ARTICLE III. MEMBERS.

All pupils of this school are eligible for membership. All persons who attend the meeting for organization shall be considered charter members. Thereafter members shall be duly proposed and elected. The teachers of the school shall be honorary members.

ARTICLE IV. MEETINGS.

Meetings shall be held at least twice each month, or on the call of the president for a suitable reason.

ARTICLE V. Dues.

The dues shall not exceed two cents per month.

ARTICLE VI. OFFICERS.

The officers of this Club shall be a president, a vice-president, a secretary and a treasurer. The term of office shall not exceed three months. The duties of the officers shall be as follows: president, to preside at all meetings; vice-president, to preside in the absence of the president; secretary to record the proceedings of all meetings and to conduct the necessary correspondence of the Club; treasurer, to collect all dues and pay all bills authorized by the Club.

ARTICLE VII. COMMITTEES.

The committees of this Club shall be: Committee on Feeding Birds in Winter; Committee on Nesting Houses; Committee on Drinking and Bathing Fountains: Committee on Plants to Attract Birds around our School and Homes; Committee on Protection of Birds during the Nesting Season; Committee on Law (to post warning notices and to report violations of the bird laws to the proper authorities): Committee on Migration Records; Committee on Preparing a Local List of Birds; Committee on Bird Census; Committee on a Bird Library for the School. These committees shall be appointed by the president, who shall also determine their size. The member first named shall be chairman.

ARTICLE VIII. Duties of Committees.

The duties of these committees shall be to collect information on the topics suggested by the names of the committees and to report at the meetings, giving suggestions to the members on the best method of procedure. It shall also be the duty of the committees to assist the members in carrying on their various lines of work and to learn the results of the members' efforts. A report of these results and of the work done by each committee shall be given at the regular meetings of the Club.



ARTICLE IX. AMENDMENTS.

Any amendments to this constitution may be adopted by a twothirds vote of the members present at any regular meeting, notice of such amendment having been presented at the previous regular meeting.

Suggestions.

The time and frequency of the meetings must be adapted to meet local conditions. In very large schools it may be preferable to or-

ganize several medium-sized clubs in place of one large one. The work of the club must be under the close supervision of the teacher, who must use some tact in directing the work so that the supervision may not be too evident to the children, who should be allowed to direct themselves as much as possible. The teacher should help the president in appointing the committees. These should be large enough, and there should be enough of them so that each child shall have some work to do. It should be made clear to the children that the work of the committees is not that they alone shall do the things suggested by the name, but that they are to help the other members of the Club to carry on the line of work suggested. A special short meeting should be called to announce the appointment of committees, at which time their duties may be briefly explained.

The purpose of the meetings should be to encourage the children to do something in the line of bird study and protection. The program should not consist of such topics and discussions as the children are able to get from books, but may consist of reports of committees showing what has been done in their line of work and giving suggestions for further work. Some of the children may be assigned special topics of outdoor studies upon which to report the results of their own observations, such as experiences in feeding birds and providing nesting houses, etc., the nesting of some kind of bird; new arrivals since the last meeting of the Club; peculiarities in the flight of birds; characteristics of the appearance and habits of certain classes of birds, as the swallows, woodpeckers, flycatchers, sparrows, etc.; identification of birds by songs; list of birds seen in a single day; each child may be assigned a certain bird to study for a season and then may report all that he had observed.

If the school does not own a lantern one should be purchased by the Club from the funds created by dues. Exhibitions of colored slides of birds, animals, flowers, trees and scenery are both instructing and interesting.

THE STUDY OF BIRDS.

AN OUTLINE FOR USE IN SCHOOLS—PREPARED FOR THE ILLINOIS AUDU-BON SOCIETY BY ALICE HALL WALTER.

FALL.—INDOOR WORK.

1. Fifteen-minute talks once a week on Migration and Bird Families.

SEPTEMBER: A Fall Journey. Sights and Flight. Distance and Danger. Food and Farmer. These talks should embrace a general description of migration, the mortality among birds on their migratory passage and an introduction to the subject of their food and economic value.

OCTOBER: Explain the significance of the terms Bird Families and Order Passers. Describe the general family characteristic of; Thrushes, Kinglets and Gnatcatchers; Nuthatches and Titmice; Creepers; Wrens and Thrashers; Wagtails.

NOVEMBER: Warblers; Vireos; Shrikes; Waxwings; Swallows; Tanagers.

DECEMBER: Sparrows and Finches; Blackbirds and Orioles; Crows and Jays; Larks; Flycatchers. Add any particular points of interest about the individual species in these families.

- 2. Ask each pupil to bring in weekly one fact about the subject under discussion. Devote 15 minutes to a verbal report of same.
- 3. Use charts and colored pictures. Trace on map the winter home of migrants.
- 4. Begin a school record of the bird population in your vicinity, using the headings, Permanent Residents, Fall and Spring Migrants, Winter Visitors, Summer Residents.
 - 5. Subscribe for The Wayside and Bird-Lore.

OUTDOOR WORK.

- 1. Begin to observe birds; remember where you see them; notice their size.
- 2. Where do you see the most birds? in the air? in the water? on the ground? on trees or about bushes?
- 3. Identify the English Sparrow, Blue Jay, Robin, Flicker, Bronzed Grackle, Barn Swallow, Brown Creeper.

- 4. Try comparing the size of these birds. Remember that the Robin is 10 inches long and the English Sparrow 6 inches long.
- 5. Do you see birds in flocks? Do you see the same birds every day throughout the fall?
 - 6. Try to learn which birds remain all the fall.
- 7. Observe what birds eat. Can you name any of the trees or shrubs on or about which you have seen birds feeding? What seeds do birds eat?
- 8. Report on these questions at school. Which birds under heading 3 are useful and need protection?

WINTER.—INDOOR WORK.

1. Talks on Bird Families continued, emphasizing adaptation of structure to flight and procuring food; the bill, tongue, tail and feet; environment and color of plumage. (See Chapman's Bird Life; Fanny Hardy Eckstorm's The Bird Book.)

JANUARY: Hummingbirds; Swifts and Goatsuckers; Woodpeckers; Kingfishers and Cuckoos,

FEBRUARY: Owls, Hawks, and other Birds of Prey; Pigeons; Grouse, Partridge.

MARCH: Plover, Snipes and Sandpipers; Rails and Coots; Herons and Bitterns; Ducks, Geese and Swans; Gulls and Terns; Loons and Grebes.

- 2. Start an Audubon Society of Reading Club holding half-hour meetings weekly.
- 3. Start a school or Audubon Society library, to be added to yearly.
- 4. Visit a museum if convenient. Mount the Mumford colored plates to hang up in school-room.
- 5. Add the "winter visitors" observed, to school record. Reports of pupils.
- 6. Let the pupils compile a school scrap-book of prose, poems and pictures about birds.

OUTDOOR WORK.

- 1. Hang out pieces of salt pork and suet. What birds like this food?
 - 2. Make a birds' lunch-counter. Who visits it?
 - 3. Do you see birds in a snow-storm? or on very cold days?

- 4. Do you find any holes in the bark of trees? If so, on what trees? how are the holes arranged? how many holes? how high up from the ground are they? what shape? who makes them?
 - 5. Do the birds sing in winter? What time of day do you see them?
- 6. Why do "winter visitors" come south? Do birds suffer from the cold?
 - 7. What do birds find to eat in winter?
- 8. What birds come first in March? Where from? Where are they going?
 - 9. Do any birds go away in March? If so, where?
- 10. Identify the Junco, Bluebird, Crow, Tree Sparrow, White-breasted Nuthatch, Shrike, Sapsucker, Cardinal, Song Sparrow, Cowbird, Downy Woodpecker.

SPRING.—OUTDOOR WORK.

- APRIL: 1. Identify the Meadowlark, Prairie Horned Lark, Phoebe, Towhee, Tree swallow, Kingfisher, Redwinged Blackbird, the Kinglets, Mourning Dove, Hermit Thrush, Chipping Sparrow, Goldfinch, Whitethroated Sparrow, Cedar Waxwing, House Wren.
 - 2. Keep track of the wind. How does it affect the birds?
- 3. Make some bird houses. (Nature Study and Life, Hodge, Chap. XX).
 - 4. What bird-songs do you hear? call-notes?
- 5. Do you see more birds on a sunny day than on a windy day? or on rainy days?
 - 6. Do you see more birds in early morning than in the afternoon?
 - 7. When do birds sing the most? How do birds sleep?
 - 8. Observe how different birds fly and walk. Do all birds walk?
- MAY: 1. Identify the Cathird, Purple Martin, Red-headed Woodpecker, Myrtle and Yellow Warblers, Least Flycatcher, Chimney Swift, Kingbird, Bobolink, Wood Thrush, Baltimore Oriole, Redeyed Vireo, Scarlet Tanager, Cuckoo, Indigo bird, Nighthawk, Wood Pewee, Hummingbird.
 - 2. Which birds sing the best? which the least?
- 3. What does the English Sparrow do? Report on its treatment of other birds.
- 4. Can you tell any birds by their flight? Try the Swallows and Woodpeckers.
- JUNE: 1. Do you see any birds making nests? What do they use? How do they work?

- 2. Do you see any new birds? Have any birds gone away? When? Where?
 - 3. Do you hear any birds singing as they fly?
- 4. Are there any marsh or water birds in your vicinity? If so, describe them.
- 5. Do you notice any difference in the plumage of male and female birds?
- 6. What do gulls and terns eat? hawks and owls? buzzards and vultures?

INDOOR WORK.

- 1. Talks on the Range and Geographical Distribution of birds and Bird Protection.
- 2. Talks on Feathers, their arrangement and uses, Moulting, Nest, and Nesting Habits.
- 3. Sketch a simple bird topography on blackboard, and have the pupils draw and name the parts.
- 4. Review of Bird Families according to the A. O. U. order. Ask each pupil to report on some subject discussed through the year. Use pictures.
- 5. Exchange migration records weekly with schools in different parts of the state and post such records on a bird bulletin-board.
- 6. Bird and Arbor Day Program. Invite friends. West Virginia game laws and the A. O. U. model protection law. Have an honor essay. Illustrate the economic value of birds by an exhibit of noxious seeds and insects. Music. Readings. Exhibit school scrapbook and pictures. Enlarge your Audubon Society.
 - 7. Encourage all original work.
 - 8. Make a bird-census and food-chart as described by Mr. Hodge.
- 9. Ask pupils to write prize letters to *The Wayside* and *Bird-Lore*.

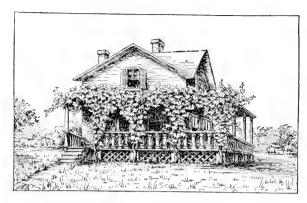
SUMMER.—OUTDOOR WORK.

- 1. Are there any birds nesting about your home? have you any eats? Try to find out why the birds do or do not nest in your grounds.
 - 2. Give the birds a dish of fresh water daily. (See Hodge.)
- 3. Study the trees, bushes and places where birds are nesting. How are the nests placed? what is their shape? which birds nest first?
- 4. Do not disturb either nests, eggs or birds. Keep your eyes open and see what goes on.



CARDINAL
UPPER FIGURE, FEMALE: LOWER FIGURE, MALE
(One-half natural size)





 $\begin{tabular}{lll} A $V{\tt INE}$ & $C{\tt LAD}$ & $P{\tt ORCH}$. \\ From B. F. Johnson & $C{\tt ompany's}$ "Agriculture." \\ \end{tabular}$



PLEASANT SURROUNDINGS.
Courtesy C. M. Parker, Taylorville, Ills.



- 5. Are there any swallows about your caves and barns or swifts in your chimneys?
- 6. What time do the birds stop feeding? How and where do birds sleep?
- 7. Are there any birds about at night? Do any birds sing or feed at night?
 - 8. Watch the baby-birds learning to fly. How do they act?
- 9. Do birds sing in July and August? Do they sing or feed when it is very hot?
- 10. Do you see birds on the telegraph and telephone wires? in deep woods? in sandy places?
 - 11. Are there as many birds now as there used to be? Why not?
 - 12. What enemies have birds? what friends?
- 13. Keep a daily record and learn to keep track of the birds about you.
 - 14. Learn the "permanent residents" in your vicinity.



INDOOR WORK.

- 1. Make a diagram reviewing the bird-census and food-chart.
- 2. Read all the bird-books you can.
- 3. Keep up the meetings of the Audubon Society and have at least four public meetings during the year.

 Make a note-book in which to record your outdoor and indoor work.

Note.—This outline is merely a collection of hints, drawn from various sources and arranged with the idea of suggesting some sort of systematic bird study. It may be simplified or enlarged to meet the needs of the pupils. If time is limited, try the outdoor work during the Spring migration, with such points of indoor work as seem best adapted to your particular school. The school-record, migration bulletin exchange, colored pictures and a Bird and Arbor Day program are earnestly recommended as being the greatest practical benefit.

THE PURPOSES OF THE SCHOOL IMPROVEMENT LEAGUL

By L. W. Burns, President.

The work of the West Virginia School Improvement League is steadily progressing.

ITS PURPOSES.

- 1. To improve and beautify school buildings without and within;
 - 2. To improve and beautify school grounds;
 - 3. To establish school libraries;
- 4. To provide playgrounds. These are all receiving much attention; but the third object, since the great awakening concerning libraries by our State Superintendent three years ago, has caused thousands of volumes to be put into the schools where they will be of untold benefit in interesting and influencing young minds, and no object of the League will have more lasting good than this.

The fourth object has recently been added, and is of great importance. I believe that if some of our great philanthropists would turn their attention to aiding in building and equipping good gymnasiums and providing good playgrounds for the millions of public school children of our country, they would in this way be of greater benefit than any other way possible to future generations. An expresident of the League said, "Let us have a large covered space near every school where the children may play." Why not have such? The cost would be little.

Much of the success of the School Improvement League depends upon the encouragement and guidance of the County Superintendents of the State. One of our oldest and best County Superintendents has devised, and has in use in his county a most excellent plan of reporting all improvements by each school. Would it not be well for others to try this?

The new school law given to the state recently will stand as a monument to the memory of those who worked so hard to secure it. It means much to our public school system. Shall we not be so encouraged by this that we will all join in the good work and determine to push forward the work of improvement to be secured by the four objects of the School Improvement League?

Marlinton, Mar. 12, 1908.

THE PROBLEM OF THE ROADS.

The law which was passed by the last session of the Legislature providing for the consolidation of rural schools is certainly a move in the right direction. That schools can and have been conducted more economically by this method than by the methods now in use in most of the districts of the State, needs no further proof than the fact that in many of the states such is true.

No reasonable man doubts the advisability of having schools graded, the pupils properly classified, the teachers placed in charge of the classes for which they are most nearly fitted by training and disposition.

No one believes that such consolidation, such classification of pupils, such adjustment of teachers to classes would not be greatly to the advantage of the pupil. Consolidation implies the transportation of pupils to and from the school. But how transport them with the present condition of our roads in most of the rural districts? There is but one method of solution; build roads. It is true that in some of the rural districts of the State good roads are already being maintained, but in most sections of the State it will be necessary to improve our roads before consolidation of schools can meet with greatest success. By improvement in this case, I do not mean to Macadamize at a cost of several thousands of dollars. The first thing necessary for any road is its proper location. No amount of money will make a good road on a poor location. You cannot build roads on steep grades except at great cost both for building and maintenance. Our ideas of road building in most districts of this State have been entirely too narrow. County Courts often send out viewers to locate roads for themselves or for the accommodation of one or two of their neighbors with no thought for the development of the country. In this way roads are located over hills, on steep grades, for the accommodation of some political healer of the county court, when the same distance would have taken the road around the hill on a level.

What matters the accommodation of my neighbor compared to the accommodation of those who draw thousands of tons of freight annually over the roads?

By properly rounding up the road, and rolling it, and by the proper use of a split-log drag costing \$2.00 or less, our earth roads can be wonderfully improved. I favor macadamizing wherever it is possible. Constant attention is necessary for the maintenance of any road. If the road is earth, ditches will be cut into it by the wagon wheels except where broad tires are used by everybody. These ditches should be filled and smoothed over with a drag just as quickly as possible so that the water may escape from the surface of the road. If the water is permitted to stand in the wagon ruts it will soon loosen up and destroy the whole foundation of the road.

If the road is macadam it may not need so much work, but it must have the same constant attention. The old expression, "A stitch in time saves nine" is certainly true in this case. Little breaks need little repairs, but a week later the little break may require repairs costing several dollars.

Some of us appreciate the great work now being done by the pubfic school teachers for the development of the State, but I dare say that even they do not realize the greatness of their position nor the power of their influence. They can, and will, teach reading, writing and arithmetic, but they can do more. They can teach the boys and girls the value of a noble Christian character. They can, to a great extent, prevent the killing of the birds which are of such immense value to the State. They can teach the boys and girls to love these rocks and hills, to love their homes and to make them better. They can create a like or a dislike for study and research in the great science of agriculture, the mastery of which requires more knowledge than any other science known to man. They can teach the pupils the necessity for preserving the forests. They can teach them how to build roads. Often a little suggestion, sometimes only a word when walking home from school, a five minutes talk on some subject may awaken thoughts and ambitions which will result in the accomplishment of great things.

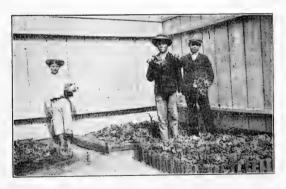
I mention these things because of my appreciation of the work of the teachers and because in my judgment, the text books contain only a small part of what we learn at school.

Very truly yours,

H. E. WILLIAMS.



A SCENE IN A LOS ANGELES SCHOOL GARDEN.



THESE BOYS WHO WERE INCORRIGIBLE BEFORE THEY BECAME INTERESTED IN SCHOOL GARDEN WORK, AFTERWARD WERE THE MOST OBEDIENT IN SCHOOL. ONE OF THEM TOOK FIRST PRIZE.

OUR STATE FLAG.

Below is found House Joint Resolution No. 2, adopted February 25th, 1907, adopting a State Flag for the State of West Virginia,

WHEREAS, The Legislature did on the 24th of February, 1905, (See Acts of 1895, pp. 320, 521) adopt a Joint Resolution providing for a State flag with design and proportions:

AND WHEREAS, Such a flag has been found to be wholly impracticable for the reason that the lettering on one side reads towards the staff and that the colors on both sides of a white field cannot be used without showing through when opposite each other, thus destroying the distinctive features of the banner and leaving the State without a prescribed official flag:

AND WHEREAS, It will be necessary that the State shall have an official flag distinctively its own, among those of other States and Nations, at the Jamestown Exposition, and as well for many other purposes and occasions hereafter; therefore be it

Resolved by the Legislature of West Virginia:

That the Legislature of West Virginia hereby adopts a State flag of the following design and proportions, to-wit: Said State flag shall be in length and breadth in proportion, the same as the flag of the great American Republic of which West Virginia forms a part; the field thereof shall be pure white, upon the center of which on the obverse side shall be the Great Seal or Coat of Arms of the State, beneath which shall appear the legend "State of West Virginia", in a scroll; on the reverse side shall appear a sprig, or sprigs of the Rhododendron Maximum, or "Big Laurel," our State flower, having blossoms and leaves; the field of pure white shall be bordered by a band or strip of blue and this in turn shall be bordered by a strip or fringe of old gold; and said flag shall be regarded and used as the West Virginia State flag on all occasions where a special display of the State's individuality shall become necessary, or be regarded as appropriate.



A LESSON IN THE SCHOOL GARDEN. Courtesy of the Flower Mission, Cleveland, Ohio.



THE RHODODENDRON AS 1T APPEARS ON OUR STATE FLAG.

		4		
·			,	
			•	

MEMORIAL DAY AND FLAG DAY EXERCISES

The following programs for Memorial Day and Flag Day will suggest to teachers a very pleasing exercise, that they may have on these occasions. Abundance of material may be found in various publications.

MEMORIAL DAY PROGRAM.

Song—In Memoriam:
Recitation—The Blue and the GrayFinch
Recitation—How Sleep the Brave
Song—God Speed the Right
Essay—Lincoln.
Recitation—O Captain! My Captain!Whitman
Song—The Battle Hymn of the Republic
Recitation—The Phantom Army
Recitation—The Bivouac of the DeadO'Hara
Song—The Breaking Waves Dashed High
Recitation—Our Standing Army
Song—America.
FLAG DAY PROGRAM, JUNE 14.

Whole school recite patriotic pledge No. 6 as given in the "Manual of Patriotism."

Song—The Red, White and Blue.

Essay—A History of the Flag.

Song—The Star Spangled Banner.

Closing pledge recited by the whole school.

"I pledge allegiance to my Flag and to the Republic for which it stands:

One Nation indivisible, with Liberty and Justice for all."



OUR OWN RED, WHITE AND BLUE.

There are many flags in many lands,
There are flags of every hue,
But there is no flag however grand,
Like our own "Red, White and Blue,"

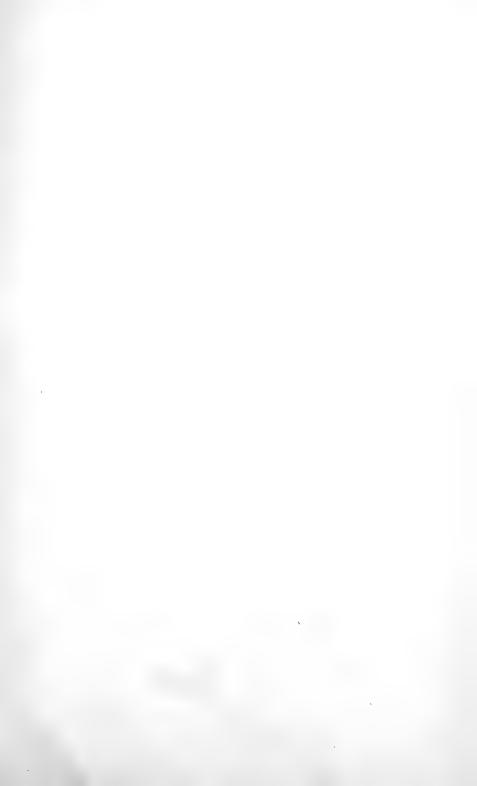
I know where the prettiest colors are,
And I'm sure if I only knew
How to get them here I could make a flag
Of glorious "Red, White and Blue."

I would cut a piece from an evening sky,
Where the stars were shining through,
And use it just as it was on high,
For my stars and field of blue.

Then I'd want a part of a fleecy cloud, And some red from a rainbow bright; And put them together side by side, For my stripes of red and white.

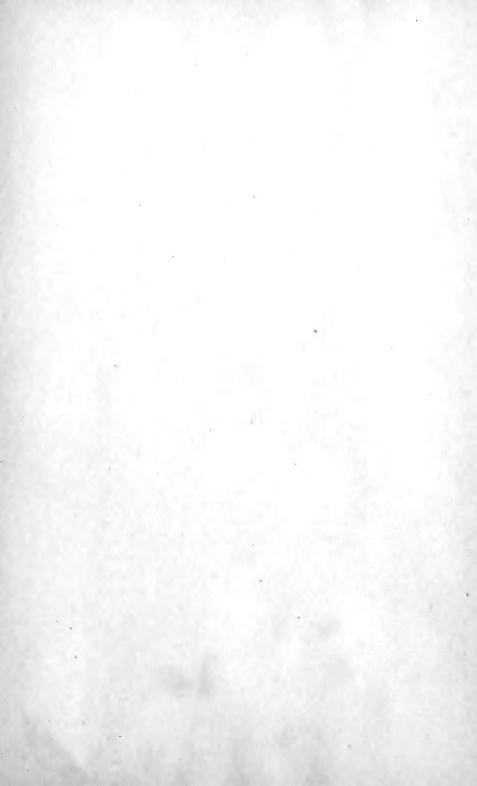
"We shall always love the Stars and Stripes,"
And we mean to be ever true
To this land of ours and the dear old flag,
The Red, the White and the Blue.

Then hurral for the flag! our country's flag,
Its stripes and white stars too,
There is no flag in any land
Like our own "Red, White and Blue."—Selected.

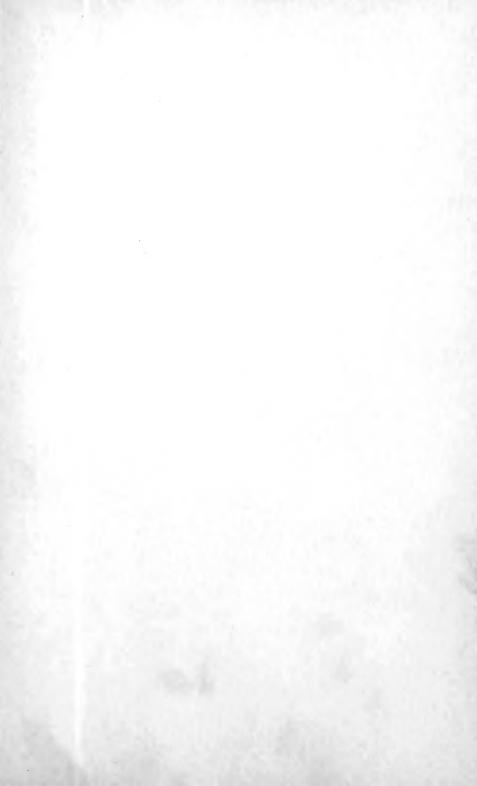




OUR STATE FLAG







LIBRARY OF CONGRESS