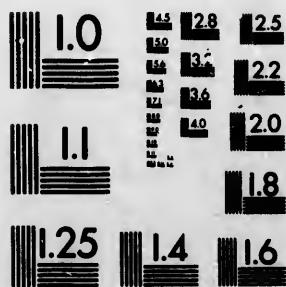


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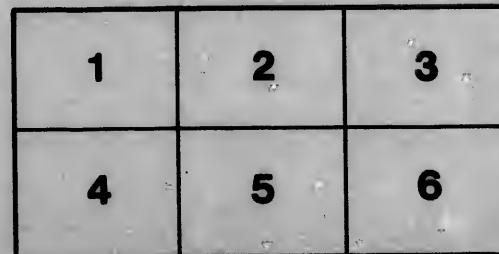
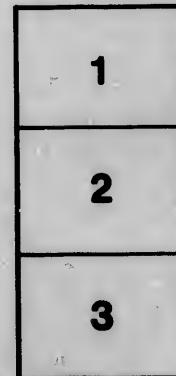
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AYSIDE TREES

SERIES II. BEING A DESCRIPTION OF THE HORN-BEAM, CHESTNUT, WILLOWS, OAKS, BUTTONWOOD, ETC. •••••

BY F. SCHUYLER MATHEWS •••
ILLUSTRATED WITH PEN AND INK
DRAWINGS FROM NATURE BY THE
AUTHOR •••••

TABER-PRANG ART CO.
SPRINGFIELD, MASS.

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INTRODUCTION

WAYSIDE TREES, SERIES II.

AS we advance in the selection of simple leaves we reach a number of trees most of which conform to a very common type; i.e. more or less pointed-elliptical, or attenuated, and evenly toothed. This division comprises the horn-beams, chestnut, beech, willows, and poplars. Then comes a break in the rule, and the undivided-edged leaf is displaced by the ornamenteally and regularly, though not deeply, divided leaf of the Thorn family. So our system progresses as follows: —

Leaves, Simple : pages

Class 3	Alternate growing	3-13
	With teeth	
	Undivided edge	
" 4	Alternate growing	15
	With teeth	
	Divided edge	

Then come the oaks which establish an independent system of their own, thus: —

	Alternate growing	pages
Class 5	Without teeth	17, 19
	Undulating edge	
" 6	Alternate growing	21
	Bristle pointed	
	Divided edge	
" 7	Alternate growing	23
	Without teeth	
	Irregular, undivided edge	

Following the oaks are two handsome trees with remarkably ornamental, large leaves, which again conform to the system broken by the eccentric oaks. The buttonwood and the liquidambar may be classified as follows: —

	Alternate growing	pages
Class 8	With teeth	25
	Divided edge	

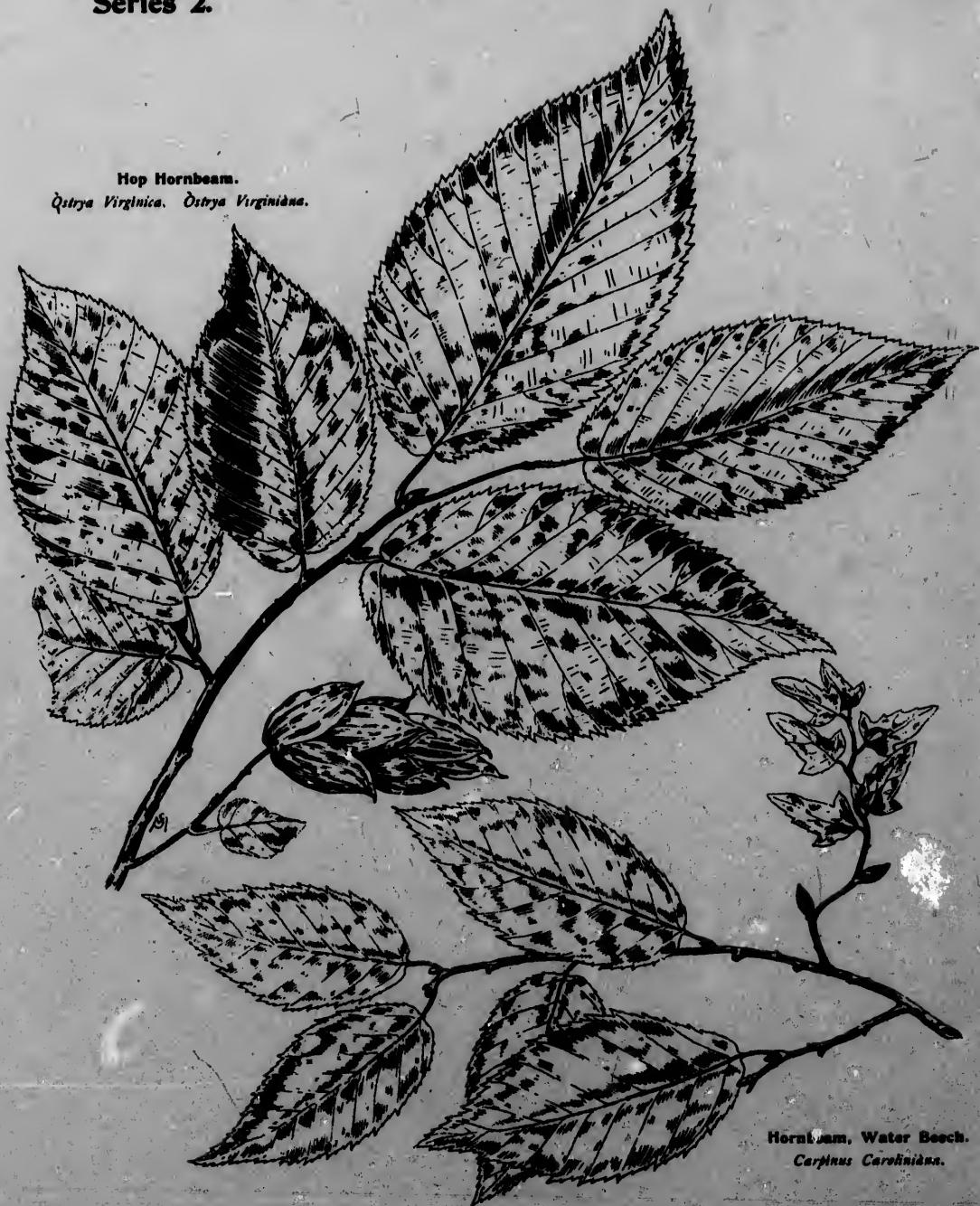
With Series II we come to the end of the trees whose leaves grow alternately on the twigs.

F. SCHUYLER MATHEWS.

Series 2.

Hop Hornbeam.

Ostrya Virginica. *Ostrya Virginiana.*



Hornbeam, Water Beech.

Carpinus Caroliniana.

Hop Hornbeam.

Ostrya Virginica. Ostrya Virginiana.

Family	CUPULIFERÆ, Oak.
Leaf	Dull, dark yellow-green, tufts of down at angles of veins beneath.
Seed	Like hop cluster, about 2 ins. long.
Bark	Light brown, rough; platelike scales; smooth upper branches marked like the birches.
Height	20 ft. to 30 ft., sometimes 60 ft.
Habitat	Me., to the Dakotas, south to northern Fla. and eastern Texas.

Hornbeam, Water Beech.

Carpinus Caroliniana.

Family	CUPULIFERÆ, Oak.
Leaf	Pale olive-green, yellowish beneath, yellow ribs.
Seed	Clusters, 3-lobed wing, seed at base, usually in pairs base to base.
Bark	Light gray-brown, dark brown horizontal bands, not furrowed, moderately rough.
Height	25 ft. to 40 ft.
Habitat	N. Y., to Tampa Bay, Fla., west to Minn., Neb., Kan., Indian Ter., and eastern Texas.

Series 2.

Beech.

Fagus Americana. Fagus ferruginea.



Chestnut.

Castanea sativa. Castanea dentata.

Chestnut.

Castanea sativa. Castanea dentata.

Family	CUPULIFERÆ, Oak.
Leaf	Dark yellow-green, yellow ribs, and pale green beneath.
Fruit	Usually 2, sometimes 3 nuts in the burr.
Bark	Dull, gray-brown, broad, flat ridges.
Height	60 ft. to 100 ft.
Habitat	Southern Me., Valley of Winooski Riv., Vt., southern shore Lake Ontario, to southeastern Mich., south to Del., and Ind., Alleghany Mts., to Ala., and Miss., central Ky., and Tenn.

Beech.

Fagus Americana. Fagus ferruginea.

Family	CUPULIFERÆ, Oak.
Leaf	Silky and thin, straight ribbed, modified green, spreads out horizontally.
Fruit	Small burr, not sharp prickles, nut three-cornered.
Bark	Whitish gray, round-spotted, very smooth.
Height	50 ft. to 70 ft., sometimes 100 ft.
Habitat	Widely distributed throughout the northern States, south to western Fla., southern Ill., and southeastern Mo., to valley of Trinity Riv., Texas.

Series 2.



Heart-leaved Willow.

Salix cordata.

Family . . .	SALICACEÆ, Willow.
Leaf . . .	Heart-shaped at base, stipules (leafy-terminals) at base of leaf stem, bright green, both sides.
Twig . . .	Light brown, brittle.
Bark . . .	Gray-brown.
Height . . .	10 ft. to 20 ft., often a shrub.
Habitat . . .	Common. A widely distributed and variable species.

Long-leaved Willow.

Salix longifolia.

Family . . .	SALICACEÆ, Willow.
Leaf . . .	Attenuated, green both sides, remotely toothed.
Twig . . .	Light or dark old gold, often dull purplish red.
Bark . . .	Smooth, dark brown, ruddy tinged, close scales.
Height . . .	Usually 20 ft., often a shrub. 70 ft.,
Habitat . . .	Western New England, to valley of Potomac Riv., west to Cal., south beside Mississippi Riv., to Tex., rare on Atlantic seaboard.

Crack Willow.

Salix fragilis.

Family . . .	SALICACEÆ, Willow.
Leaf . . .	Slender, light green, pale beneath, tiny wart one on each side of stem at base of leaf.
Twig . . .	Somewhat green-yellow, very brittle at base.
Bark . . .	Dark brown, rough.
Height . . .	50 ft. to 80 ft.
Habitat . . .	Not indigenous, from Europe, extensively naturalized in northeastern States, common in Mass., N. H., and Vermont.

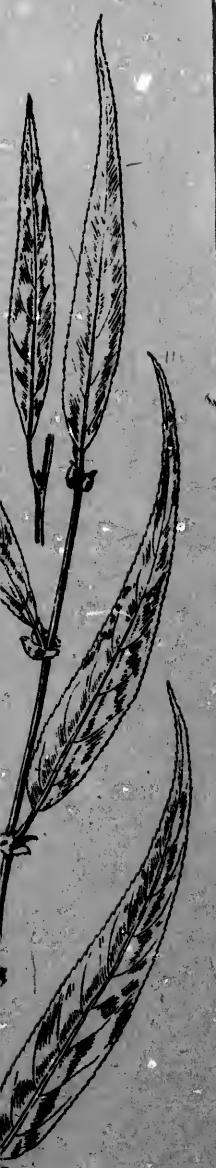
Series 2.



White Willow.
Salix alba var. *tarikhia*.

Weeping Willow.
Salix Babylonica.

Black Willow.
Salix nigra.



White Willow.

Salix alba var. *caroliniana*.

Family	SALICACEÆ, Willow.
Leaf	Smooth, firm, dull bluish green, whitish beneath.
Twig	Olive-green.
Bark	Dark brown, rough.
Height	50 ft. to 70 ft.
Habitat	Not indigenous, but extensively naturalized in N. H., and Mass.

Weeping Willow.

Salix Babylonica.

Family	SALICACEÆ, Willow.
Leaf	Slender, light green, hanging from slender branchlets.
Twig	Very slender, yellow-green or light brown, suspended.
Bark	Rough, dark brown.
Height	40 ft. to 60 ft.
Habitat	Not indigenous; from Syria, spreading along river banks, parks, gardens, and city streets.

Black Willow.

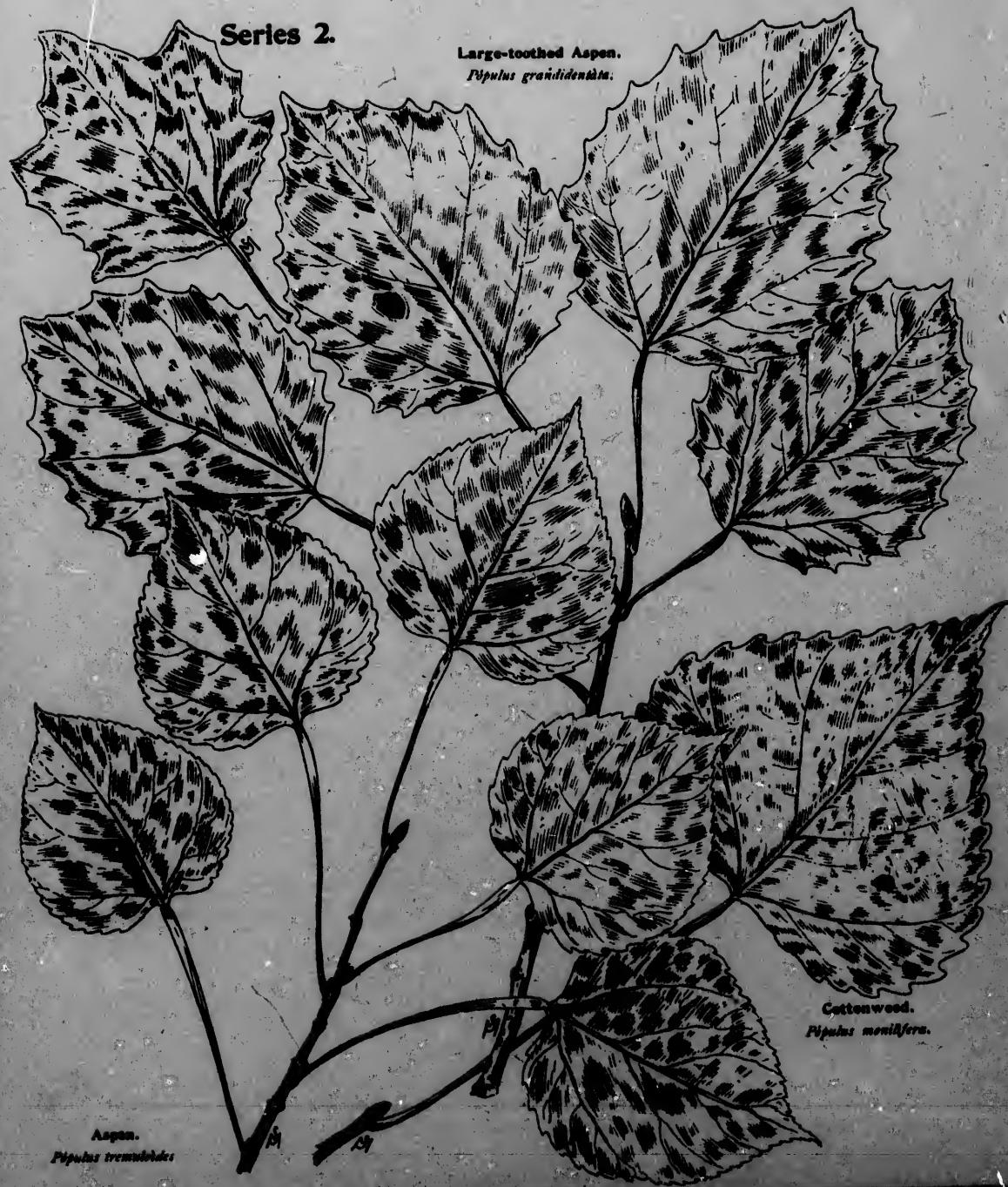
Salix nigra.

Family	SALICACEÆ, Willow.
Leaf	Tapering tips somewhat curved, roundish or wedge-shaped base, light green.
Twig	Slender, stipule (leaflet) at base of leaf-stem, deciduous, often absent.
Bark	Dark brown, sometimes lighter brown, rough.
Height	30 ft. to 40 ft., occasionally 120 ft.
Habitat	Shores Lakes Huron and Superior, northern Vt. and N. Y., south to Fla., west to Dak., Neb., Kan., Oklahoma and western Texas.

Black Willow.
Salix nigra.

Series 2.

Large-toothed Aspen.
Populus grandidentata.





Large-toothed Aspen.

Populus grandidentata.

Family	SALICACEÆ, Willow.
Leaf	Dark, whitish green, coarsely toothed, flat stem.
Bark	Grayish-green, fissured, base of trunk brownish.
Height	40 ft. to 70 ft., rarely 80 ft.
Habitat	Me., to Minn., south to northern Del., southern Ind., and Ill., Alleghany Mts., to N. Car. westward to central Ky., and Tenn.



Aspen.

Populus tremuloides.

Family	SALICACEÆ, Willow.
Leaf	Dark whitish green, flat stem.
Bark	Whitish-green, dull, horizontal scars, trunk-base blackish.
Height	25 ft. to 50 ft., occasionally 100 ft.
Habitat	Northern States to mts. of Penn., northeastern Mo., southern Neb., the mts. of the West. The most widely distributed tree of North America.



Cottonwood.

Populus monilifera.

Family	SALICACEÆ, Willow.
Leaf	Firm, light green, pale beneath, yellow midrib, flat stemmed.
Bark	Ash-gray, yellowish, sometimes tinged green.
Height	70 ft. to 80 ft., sometimes 100 ft.
Habitat	Shore Lake Champlain, Vt., western New England, N.Y., Pa., west of Alleghany Mts., Atlantic States south of the Potomac Riv., to western Fla., west to Rocky Mts.

Series 2.

Balsam Poplar, Tacamahac.

P. balsamifera var. *intermedia*.

P. balsamifera

var. *Viminalis*.

P. balsamifera var. *lutea*.

Balm of Gilead.

Populus balsamifera var. *candida*.



Balm of Gilead.

Populus balsamifera var. *candicans*.

Family	SALICACEÆ, Willow.
Leaf	Broad, ribs and veins downy, deep green, whitish beneath; buds odoriferous.
Bark	Light gray-brown, small scales.
Height	40 ft. to 70 ft.
Habitat	Northeastern States, rare wild, common in cultivation.

Other common varieties of the Balsam Poplar.

P. balsamifera var. *intermedia*.

P. balsamifera var. *Vimindis*.

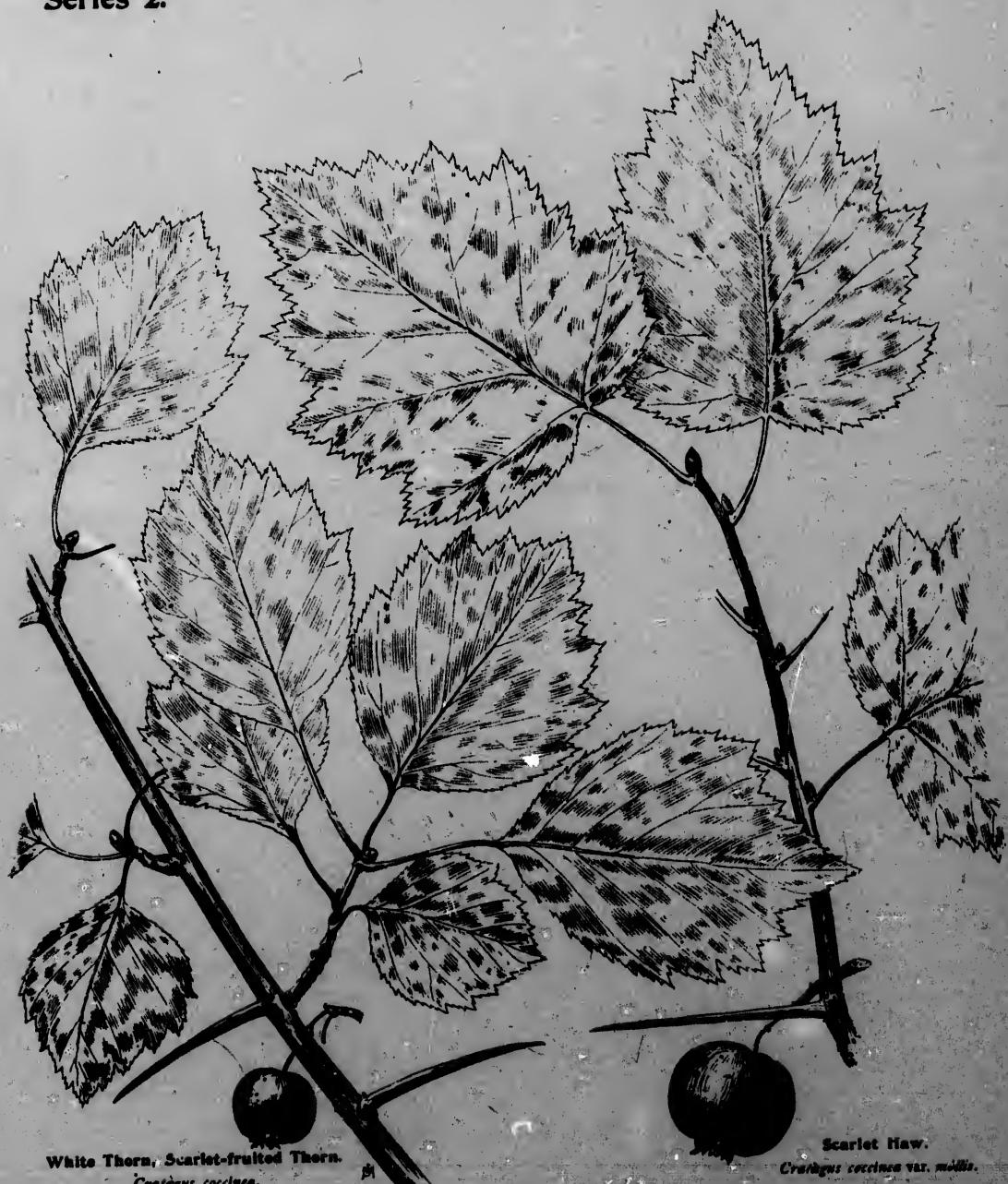
P. balsamifera var. *latifolia*.

Balsam Poplar, Tacamahac.

Populus balsamifera.

Family	SALICACEÆ, Willow.
Leaf	Thin, deep dark-green, shiny, paler beneath.
Bark	Gray tinged with red, close scales, branches tinged green.
Height	60 ft. to 70 ft., sometimes 100 ft.
Habitat	Northern New England, N. Y., central Mich., and Minn., Dak., northwestern Neb., Idaho, Oregon, and Nev.

Series 2.



White Thorn, Scarlet-fruited Thorn.
Crataegus coccinea.

Scarlet Haw.
Crataegus coccinea var. mollis.

White Thorn, Scarlet-fruited Thorn.

Crataegus coccinea.

Family	ROSACEÆ, Rose.
Leaf	Slender stems, thin, light dull-green.
Fruit	Small, dull red.
Bark	Rough, gray-brown, small scales.
Height	12 ft. to 18 ft., rarely 20 ft.
Habitat	Me., to northern Fla., and eastern Tex., westward to Neb. and Kan.; common in northern States.

Scarlet Haw.

Crataegus coccinea var. mollis.

Family	ROSACEÆ, Rose.
Leaf	Large, firm, more or less woolly beneath, light green.
Fruit	Dull scarlet, large, 1 in. broad.
Bark	Gray-brown, and ruddy brown, small scales.
Height	15 ft. to 30 ft.
Habitat	Eastern Mass., through central Mich. to Mo., central Tenn., Ark., to Tex.

Series 2.

Post Oak, Iron Oak.

Quercus stellata.



Bur Oak, Overcup Oak.

Quercus macrocarpa.

White Oak

Quercus alba.



White Oak.
Quercus alba.

Post Oak, Iron Oak
Quercus stellata.

Family . . . CUPULIFERÆ, Oak. Class, White Oaks.
Leaf . . . 5 to 7 round flaring lobes, rough, deep green.
Acorn . . . Moderate size, short stem, deep cup, small scales.
Bark . . . Dark, brownish gray, resembling White Oak.
Height . . . 50 ft. to 60 ft., rarely 100 ft.
Habitat . . . Cape Cod, Mass., to R. I., Long Island, and to northern Fla., southwestward to Texas.

Bur Oak, Overcup Oak.
Quercus macrocarpa.

Family . . . CUPULIFERÆ, Oak. Class, White Oaks.
Leaf . . . Deeply round-lobed, large, 6 ins. to 10 ins. long, deep shiny green.
Acorn . . . Stout, round, variable in size, fringed deep cup, nut half or more in cup.
Bark . . . Light brown, deeply furrowed.
Height . . . 70 ft. to 100 ft., rarely 170 ft.
Habitat . . . Penobscot Riv. Val., Me., shore Lake Champlain, Vt., Ware Riv., Mass., Buck and Lancaster Cos., Pa., west to Montana and Oklahoma.

White Oak.
Quercus alba.

Family . . . CUPULIFERÆ, Oak. Class, White Oaks.
Leaf . . . 3 to 9 round lobes, bright green.
Acorn . . . Rough cup, usually long stem, sweet nut.
Bark . . . Very light buff-gray, moderately rough, thin scales.
Height . . . 70 ft. to 100 ft., sometimes 150 ft.
Habitat . . . Me., to Minn., and south, rare in northern New England.

Series 2.





Basket Oak, Cow Oak.

Quercus Michauxii.

Family	CUPULIFERÆ, Oak. Class, Chestnut Oaks.
Leaf	Obtuse at base, large-toothed (about 24), medium green, woolly beneath.
Acorn	Rough, shallow, small-scaled cup, long nut, sweet and large.
Bark	Silvery gray, flaky.
Height	60 ft. to 100 ft.
Habitat	Swamps, and beside streams; Wilmington, Del., south to northern Fla., and from Ind., and Mo., south to Texas and the Gulf.

Yellow Chestnut Oak.

Quercus acuminata.

Family	CUPULIFERÆ, Oak. Class, Chestnut Oaks.
Leaf	Narrow (2 inches wide), sharply toothed, yellow-green, grayish beneath.
Acorn	Rounded thin cup, covering one-third of nut, close scales.
Bark	Dull silvery gray, scaly.
Height	50 ft. to 80 ft., rarely 160 ft.
Habitat	Mass., to Neb., and eastern Kan., south to Texas.

Swamp White Oak.

Quercus bicolor.

Family	CUPULIFERÆ, Oak. Class, Chestnut Oaks.
Leaf	Wavy edge, shining, moderate green, whitish downy beneath.
Acorn	Rough cup, bristly edged, usually long stem, sweet nut.
Bark	Light buffish gray, moderately rough, short fissures.
Height	50 ft. to 70 ft.
Habitat	Southern Me., to Iowa, Mo., and Alleghany Mts., to Ga.

Chestnut Oak.

Quercus prinus.

Family	CUPULIFERÆ, Oak. Class, Chestnut Oaks.
Leaf	Thick, yellow-green, 10 to 15 pairs straight ribs, trifle downy beneath.
Acorn	Large, cup thick with stout scales.
Bark	Brownish gray, deeply furrowed.
Height	60 ft. to 70 ft., occasionally 100 ft.
Habitat	Southern coast of Me., to Del. and District of Columbia, Alleghany Mts., to Ala., west shore of Lake Champlain, Valley of Genesee River, N. Y., shores of Lake Erie, south to Tenn.

Series 2.



Black Oak.

Quercus coccinea var. *histeria*.
Quercus velutina.



Spanish Oak.

Quercus falcata. *Quercus digitata*.

Family	CUPULIFERÆ, Oak. Class, Red Oaks.
Leaf	Variable shape, thin, dark green, rusty downy beneath.
Acorn	Two years to mature, cup thin, saucer-shaped, nut $\frac{1}{2}$ in. long.
Bark	Dark brown, with shallow seams.
Height	45 ft. to 70 ft., occasionally 100 ft.
Habitat	Bucks Co., Pa., southern N. J., south to central Fla., Gulf States to Tex., Ark., southwestern Mo., to central Tenn., and Ky., and southern Ill., and Ind.

Black Oak.

Quercus coccinea var. *finechria*. *Quercus velutina*.

Family	CUPULIFERÆ, Oak. Class, Red Oaks.
Leaf	Deep shiny green, smooth, sometimes downy beneath.
Acorn	Rough cup, often striped, two years to mature.
Bark	Very dark brown, nearly black on smaller branches.
Height	70 ft. to 80 ft., sometimes 150 ft.
Habitat	Southern N. E. to Gulf States, westward to Kan. and Texas.

Red Oak.

Quercus rubra.

Family	CUPULIFERÆ, Oak. Class, Red Oaks.
Leaf	Pointed-lobed, bristle-tipped, deep bright green.
Acorn	Two years to mature, saucer-shaped cup, large nut.
Bark	Dark, gray-brown, scaly plates.
Height	70 ft. to 80 ft.
Habitat	Me., to Tenn., in Alleghany Mts., to northern Ga., westward to Minn., and cen. Kan.

Scarlet Oak.

Quercus coccinea.

Family	CUPULIFERÆ, Oak. Class, Red Oaks.
Leaf	Deeply and broadly cut, bright green; in autumn bright red.
Acorn	Two years to mature, deep cup-shaped cup, close scales.
Bark	Red inside, light brown outside, small scales.
Height	60 ft. to 80 ft.
Habitat	Androscoggin River, Me., southern N. H., Vt., and central N. Y.; west to Mich., Minn., and southeastern Neb., south to Dist. of Columbia, northern Ill., and Alleghany Mts. to N. C.

Pin Oak.

Quercus palustris.

Family	CUPULIFERÆ, Oak. Class, Red Oaks.
Leaf	Rather small, dark lustrous green, pale below with tufts of light hairs on veins.
Acorn	Two years to mature, cup shallow, saucer-shaped, nut round.
Bark	Gray-brown, small, close scales.
Height	60 ft. to 80 ft., sometimes 120 ft.
Habitat	Connecticut River Val., near Amherst, Mass., to southern Mo., south to lower Potomac Riv. Val., Va., and to central Ky., northern Ark., and eastern Indian Ter.

Character: Branches are set with short spurs or pinlike branchlets.

Pin Oak.

Quercus palustris.



Series 2.

Black Jack Oak.
Quercus nigra. Quercus Marilandica.

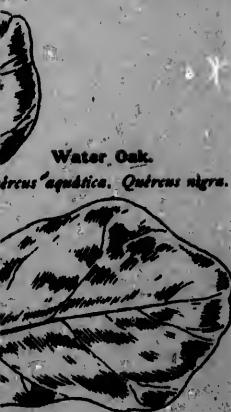


Water Oak.
Quercus aquatica. Quercus nigra.

Laurel Oak.
Quercus imbricaria.

Willow Oak.
Quercus Phellos.

L. W. A.



Water Oak.
Quercus aquatica. *Quercus nigra*.



Willow Oak.
Quercus Phellos.

L. & C.

Black Jack Oak.

Quercus nigra. *Quercus Marilandica*.

Family	CUPULIFERÆ, Oak. Class, Leather-leaved Oaks.
Leaf	Thick, firm, dark olive-green, brownish yellow beneath.
Acorn	Two years to mature, shallow cup small scales on edge, round nut.
Bark	Very dark brown.
Height	20 ft. to 30 ft., occasionally 50 ft.
Habitat	Long Island, N. Y., northern Ohio and Ind., to southeastern Neb., central Kan., and Ind. Ter., south to Fla. and Texas.

Laurel Oak.

Quercus imbricaria.

Family	CUPULIFERÆ, Oak, or Shingle Oak. Class, Leather-leaved Oaks.
Leaf	Plain edge, thick, stiff, shiny dark green, pale and downy beneath.
Acorn	Squatty-shaped, scaled, thin cup, round nut, bitter.
Bark	Light brown, ruddy scales.
Height	30 ft. to 60 ft., rarely 100 ft.
Habitat	Lehigh Co., Pa., to Wis., Mo., and northeastern Kan., south in Alleghany Mts., to Ga. and Ala., and from Tenn. to northern Ark.

Water Oak.

Quercus aquatica. *Quercus nigra*.

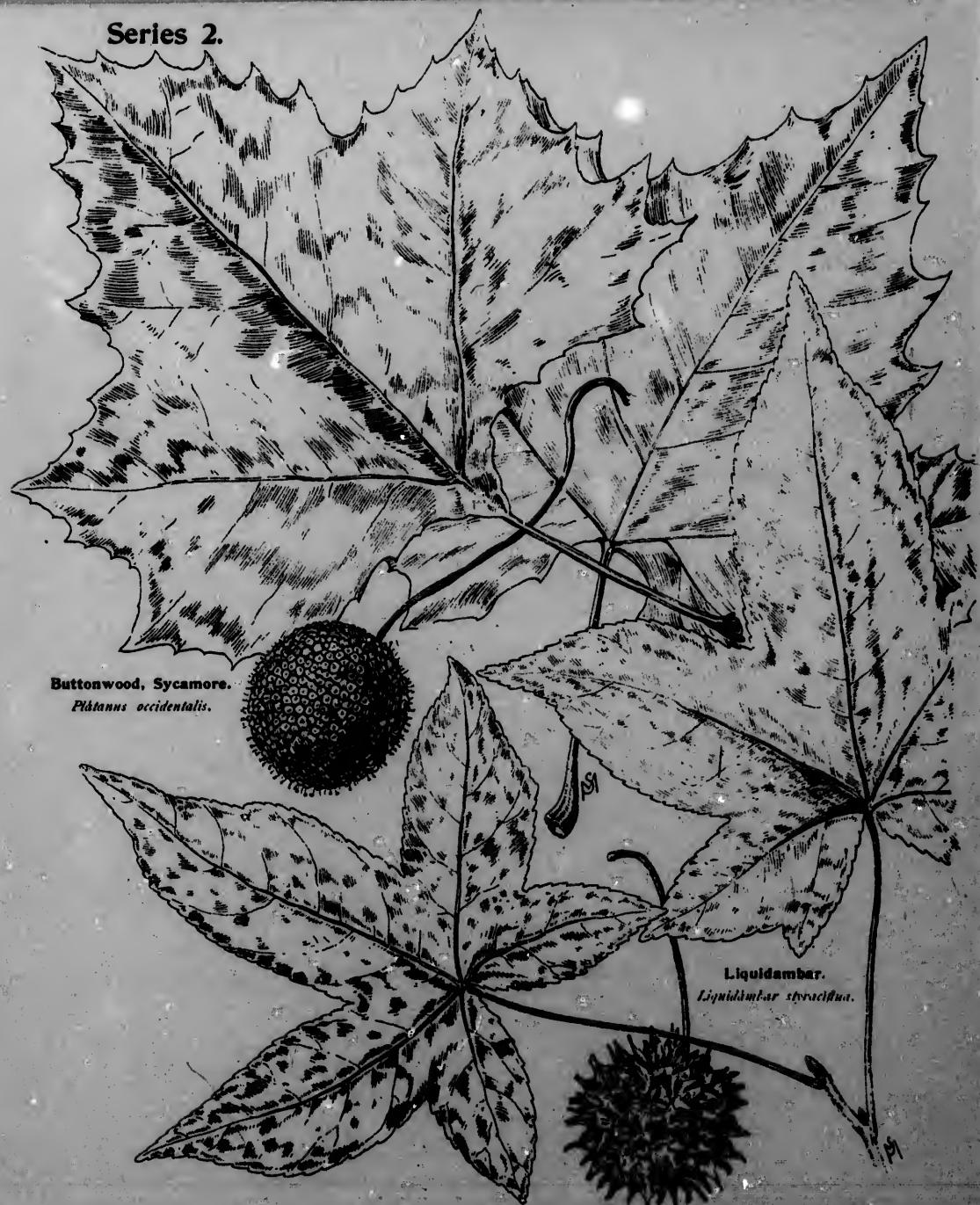
Family	CUPULIFERÆ, Oak. Class, Leather-leaved Oaks.
Leaf	Dull dark green, pale beneath, hairs at junction of veins.
Acorn	Two years to mature, shallow cup, close scales.
Bark	Brown, smooth, small scales, slender branchlets.
Height	35 ft. to 50 ft., occasionally 80 ft.
Habitat	Southern Del., south to Tampa Bay, Fla., Gulf States, to Val. of Colorado River, Tex., Ind. Ter., Ark., Mo., and to central Tenn., and Ky.

Willow Oak.

Quercus Phellos.

Family	CUPULIFERÆ, Oak. Class, Leather-leaved Oaks.
Leaf	Bright moderate green, dull, pale below, tenacious color.
Acorn	Tiny, saucer-shaped cup, round nut, orange-yellow, and bitter.
Bark	Reddish brown, close scales.
Height	30 ft. to 60 ft., sometimes 80 ft.
Habitat	Tottenville, S. I., N. Y., to northeastern Fla., Gulf States to Tex., southern Kan., to southeastern Mo.

Series 2.



Buttonwood, Sycamore.
Platanus occidentalis.

Liquidambar.
Liquidambar styraciflua.



Buttonwood, Sycamore.

Platanus occidentalis.

Family	PLATANACEÆ, Plane-Tree.
Leaf	Shining green, smooth, firm.
Seed	Ball, suspended with wirelike stem, pin-head markings.
Bark	Smooth, thin, brown, scaling, leaving smooth gray trunk beneath.
Height	80 ft. to 100 ft., occasionally 170 ft.
Habitat	Southeastern N. H., southern Me. to northern Vt., westward to eastern Neb. and Kan., south to northern Fla., central Ala., Miss., and Valley of Brazos River, Texas.

Liquidambar.

Liquidambar styraciflua.

Family	HAMAMELIDEÆ, Witch-Hazel.
Leaf	One-sided star shape, 5 to 7 lobes, thin, bright green, smooth.
Seed	In a spherical pod-cluster, mostly abortive seed.
Bark	Gray, rough, corky ridges on the branchlets.
Height	60 ft. to 80 ft., sometimes 140 ft.
Habitat	Fairfield Co., Conn., to southeastern Mo., south to Tampa Bay, Fla., through Ark. and Ind. Ter., to Valley of Trinity Riv., Texas.

Character: Leaves and bruised branches exhale
a resinous odor.

A REVISED LIST OF BOTANICAL NAMES OF THE TREES.

THE botanical names of trees have been revised according to certain laws now adopted by many botanists, and a more important revision, according to the Check-List made by George B. Sudworth, prepared under the direction of Prof. B. E. Fernow, for the United States Department of Agriculture, is given below, accompanied by a revision by Prof. C. S.argent (see *Silva of North America*), and the older

names according to Dr. Asa Gray (see Manual). The preference given in this book to the nomenclature of Dr. Gray, is naturally conservative, but consistent with the fact that Dr. Gray's Manual is its standard of authority; at the same time the reform in the use of names is sure to be established in time, and the accompanying list is essentially valuable to a popular work of this kind.

Dr. ASA GRAY.	C. S. SARGENT.	EDD. B. SUBWORTH.
Allianthus or Alliantus. Alder, Black. Arbor Vitæ, or White Cedar. Ash, Black. Ash, Blue. Ash, Green. Ash, Mountain. Ash, Red. Ash, Water or Swamp. Ash, White. Aspen. Aspen, Large-toothed. Balm of Gilead.	Allianthus glandulosus. Jex verticillata. Thuja occidentalis. Fraxinus americana. Fraxinus quadrangulata. Fraxinus viridis. Pyrus Americana. Fraxinus pubescens. Fraxinus platycarpa. Fraxinus Americana. Populus tremuloides. Populus grandidentata. Populus balsamifera var. canadensis. Tilia pubescens. Fagus ferruginea. Ecclesia glabra. Ecclesia flava. Euonymus Europaeus. Juglans cinerea. Platanus occidentalis. Betula lutea. Betula alba. Betula populifolia. Betula papyrifera. Betula nigra. Betula lutea. Catalpa bignonioides. Juniperus Virginiana. Chamaecyparis sphaeroides. Prunus serotina. Prunus Virginiana. Prunus Pensylvanica. Castanea sativa var. Ameri- casea. Populus monilifera. Magnolia acuminata. Corvus atricapillus. Corvus Florida. Ulmus Americana. Ulmus racemosa. Ulmus fulva. Abies balsamea. Chionanthus Virginicus. Celtis occidentalis. Viburnum prunifolium. Crataegus coccinea var. mollis. Tsuga Canadensis. Carpinus caroliniana. Carya ovata. Carya alba. Carya aquatica. Carya tomentosa. Ilex opaca. Carpinus Caroliniana. Ostrya Virginiana.	Fraxinus aligra. Fraxinus Pennsylvanica var. lanceolata. Fraxinus Pennsylvanica. Fraxinus Caroliniana. Fagus Americana. Ecclesia octandra. Catalpa catalpa. Cupressus thyoides. Castanea dentata. Populus deltoides. Ulmus americana. Ulmus pubescens. Chionanthus virginicus. Tsuga canadensis. Hicoria glabra. Hicoria ovata. Hicoria münchii. Hicoria alba. Carpinus caroliniana. Ostrya virginiana. Ecclesia Hippocastanum. Gymnocladus dioica.
Basswood, Small-leaved. Beech. Buckeye, Ohio or Fétid. Buckeye, Sweet. Burning Bush. Butternut or Sycamore. Birch, Black, or Sweet. Birch, European. Birch, Gray. Birch, Paper, Casee, or White. Birch, Red, or River. Birch, Yellow. Catappa. Cedar, Red. Cedar, White. Cherry, Black. Cherry, Coke. Cherry, Red, or Bird Cherry. Chestnut. Cottonwood. Cucumber Tree. Dogwood, Alternate-leaved. Dogwood, Flowering. Elm, American, or White. Elm, Corky White. Elm, Red, or Slippery. Fr. Balsam. Fringe Tree. Hackberry, or Sugarberry. Haw, Black. Haw, Sweet. Hemlock. Hickory, Brown, or Pigment. Hickory, or Shagbark. Hickory, Swamp, or Bitternut. Hickory, White-heart, or Mockernut. Holly, American. Hornbeam, or Water Beech, or Blot Beech. Hornbeam, Hop, or Iron- wood. Horn Chestnut. Ilex, Mountain. Kentucky Coffee Tree.		

AMES

Manual). The nomenclature of but consistent in its standard form in the use of time, and the appeal to a popular

BUDWORTH.

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	DR. ASA GRAY.	C. S. GARDNER.	DR. B. SUDWORTH.
Larch, American, or Hack-matuck.	<i>Larix Americana.</i>	<i>Larix laricina.</i>	<i>Larix laricina.</i>
Linden, American, or Basswood.	<i>Tilia Americana.</i>		<i>Tilia americana.</i>
Liquidambar, or Sweet Gum.	<i>Liquidambar styraciflua.</i>		
Locust.	<i>Robinia Pseudacacia.</i>		<i>Robinia pseudacacia.</i>
Honey.	<i>Gleditschia triacanthos.</i>		<i>Gleditschia triacanthos.</i>
Magnolia, Small, or Sweet Bay.	<i>Magnolia glauca.</i>		
Maple, Ash-leaved, or Box Elder.	<i>Negundo aceroides.</i>	<i>Acer negundo.</i>	<i>Acer negundo.</i>
Maple, Black Sugar.	<i>Acer saccharinum var. nigrum.</i>	<i>Acer saccharinum var. nigrum.</i>	<i>Acer saccharum nigrum.</i>
Maple, Mountain.	<i>Acer spicatum.</i>		
Maple, Norway.	<i>Acer platanoides.</i>		
Maple, Red, or Swamp.	<i>Acer rubrum.</i>		
Maple, Striped, or Goosefoot.	<i>Acer pensylvanicum.</i>		
Maple, Sugar, or Rock.	<i>Acer saccharinum.</i>		
Maple, White or Silver.	<i>Acer dasycarpum.</i>		
Mulberry, Red.	<i>Morus rubra.</i>		
Oak, Basket, or Cow.	<i>Quercus Michauxii.</i>		
Oak, Black.	<i>Quercus coccinea var. tinctoria</i>		
Oak, Black Jack.	<i>Quercus nigra.</i>		
Oak, Bur, or Overcup.	<i>Quercus macrocarpa.</i>		
Oak, Chestnut.	<i>Quercus prinus.</i>		
Oak, Laurel.	<i>Quercus imbricaria.</i>		
Oak, Pin.	<i>Quercus palustris.</i>		
Oak, Post, or Iron.	<i>Quercus stellata.</i>		
Oak, Red.	<i>Quercus rubra.</i>		
Oak, Scarlet.	<i>Quercus coccinea.</i>		
Oak, Spanish.	<i>Quercus falcata.</i>		
Oak, Swamp White.	<i>Quercus bicolor.</i>		
Oak, Water.	<i>Quercus aquatica.</i>		
Oak, White.	<i>Quercus alba.</i>		
Oak, Willow.	<i>Quercus Phellos.</i>		
Oak, Yellow Chestnut.	<i>Quercus Muhlenbergii.</i>		
Pawpaw, or Custard Apple.	<i>Annona triloba.</i>		
Persimmon.	<i>Diospyros Virginiana.</i>		
Pine, Gray, or Jack.	<i>Pinus Banksiana.</i>		
Pine, Jersey Scrub.	<i>Pinus strobus.</i>		
Pine, Loblolly, or Old Field.	<i>Pinus taeda.</i>		
Pine, Northern Pitch.	<i>Pinus rigida.</i>		
Pine, Red, or Norway.	<i>Pinus resinosa.</i>		
Pine, Southern Yellow, or Georgia, or Long-leaf.	<i>Pinus palustris.</i>		
Pine, Table Mountain.	<i>Pinus pungens.</i>		
Pine, White.	<i>Pinus strobus.</i>		
Pine, Yellow, Short-leaf Pine.	<i>Pinus sylvestris.</i>		
Plum, Canada.	<i>Prunus Americana.</i>		
Poplar, Balsam.	<i>Populus balsamifera.</i>		
Poplar, Balsam — Varieties.	<i>Populus balsamifera var. intermedia.</i>		
	<i>Populus balsamifera var. latifolia.</i>		
	<i>Populus balsamifera var. viminalis.</i>		
Poplar, White.	<i>Populus alba.</i>		
Red Bed, or Judas Tree.	<i>Cercis Canadensis.</i>		
Sassafras.	<i>Sassafras officinale.</i>		
Spruce, Black.	<i>Picea nigra.</i>		
Spruce, Red.	<i>Picea nigra var. rubra.</i>		
Spruce, White, or Cat.	<i>Picea abies.</i>		
Thorn, White, or Scarlet-Weed.	<i>Crataegus coccinea.</i>		
Tulip Tree.	<i>Liriodendron tulipifera.</i>		
Tupelo, or Sour Gum.	<i>Nyssa sylvatica.</i>		
Umbrella Tree.	<i>Magnolia Umbrella.</i>		
Viburnum, Sweet, or Sheep-berry.	<i>Viburnum Lantago.</i>		
Walnut, Black.	<i>Juglans nigra.</i>		
Walnut, Black.	<i>Salix nigra.</i>		
Willow, Crack.	<i>Salix fragilis.</i>		
Willow, Heart-leaved.	<i>Salix cordata.</i>		
Willow, Long-leaved.	<i>Salix longifolia.</i>		
Willow, Weeping.	<i>Salix Babylonica.</i>		
Willow, White.	<i>Salix alba var. caroliniana.</i>		
Yellowwood, or Virgilia.	<i>Claudatia tinctoria.</i>		
	<i>Cladrastis kentukea.</i>		
	<i>Cladrastis lutea.</i>		
	<i>Magnolia tripetala.</i>		
	<i>Viburnum lantago.</i>		
		<i>Salix tristis.</i>	
		<i>Salix babylonica.</i>	
		<i>Cladrastis lutea.</i>	

ALPHABETICAL INDEX

OF THE FOUR SERIES OF WAVESIDE TREES.

	Series Pp.		Series Pp.		Series Pp.		Series Pp.		
Abele Tree	II-11	<i>Chamærypis sphaeroides</i>	IV-25	Maple, Rock	III-11	<i>Populus tremulifera</i>	II-11	<i>Populus tremulidae</i>	II-11
Acer balticum	IV-21	Cherry, Bird	I-13	Maple, Silver	III-17	<i>Prunus Americana</i>	II-13	<i>Prunus Americana</i>	II-13
Acer dasycarpum	III-17	Cherry, Black	I-15	Maple, Striped	III-19	<i>Prunus nigra</i>	II-13	<i>Prunus nigra</i>	II-13
Acer negundo	IV- 7	Cherry, Choke	I-15	Maple, Sugar	III-11	<i>Prunus Pennsylvania</i>	II-13	<i>Prunus Pennsylvania</i>	II-13
Acer Pennsylvanicum	III- 9	Cherry, Red	I-13	Maple, Swamp	II-19	<i>Prunus serotina</i>	II-15	<i>Prunus serotina</i>	II-15
Acer platanoides	III-19	Chestnut	II- 5	Maple, White	III-17	<i>Prunus Virginiana</i>	II-15	<i>Prunus Virginiana</i>	II-15
Acer rubrum	III-19	<i>Clinodendrus Virginiae</i>	III- 5	Mockernut	IV- 3	<i>Pyrus Americana</i>	II-13	<i>Pyrus Americana</i>	II-13
Acer saccharinum	III-11	<i>Cladostachys Nasturtia</i>	III-14	Morinda rubra	I-21	<i>Quercus alba</i>	II-17	<i>Quercus alba</i>	II-17
Acer saccharinum var. mi- grans	III-11	<i>Cornus alternifolia</i>	III- 3	Mulberry, Red	I-21	<i>Quercus aquatica</i>	II-13	<i>Quercus aquatica</i>	II-13
Acer spicatum	III- 9	<i>Cornus florida</i>	III- 3	Nightshade arborescens	IV- 7	<i>Quercus bicolor</i>	II-19	<i>Quercus bicolor</i>	II-19
Aesculus glabra	IV-13	Cottonwood	II-11	<i>Nympha coccinea</i>	I- 5	<i>Quercus cornuta</i>	II-21	<i>Quercus cornuta</i>	II-21
Aesculus Hippocastanum	IV-13	<i>Craugastus coccineus</i>	II-13	Oak, Basket	II-19	<i>Quercus var. bicoloria</i>	II-21	<i>Quercus var. bicoloria</i>	II-21
Aesculus Glandulosa	IV-13	Cucumber Tree	II-15	Oak, Black	II-21	<i>Quercus digitata</i>	II-21	<i>Quercus digitata</i>	II-21
Aesculus or Aesculus	III-15	Curd Apple	I- 3	Oak, Black Jack	II-23	<i>Quercus falcata</i>	II-21	<i>Quercus falcata</i>	II-21
Alexandra glandulosa	III-15	<i>Diospyros Virginiana</i>	I- 5	Oak, Bur	II-17	<i>Quercus fabricaria</i>	II-19	<i>Quercus fabricaria</i>	II-19
Alder, Black	I-11	Dogwood, Alternate-leaved	III- 3	Oak, Chestnut	II-19	<i>Quercus macrocarpa</i>	II-17	<i>Quercus macrocarpa</i>	II-17
Alder Vib.	IV-25	Dogwood, Flowering	III- 3	Oak, Cow	II-17	<i>Quercus Marinensis</i>	II-23	<i>Quercus Marinensis</i>	II-23
Ash, Black	IV-11	Elae, American	I-17	Oak, Iron	II-17	<i>Quercus Mlichensis</i>	II-19	<i>Quercus Mlichensis</i>	II-19
Ash, Blue	IV- 9	Elae, Cory White	I-19	Oak, Laurel	II-19	<i>Quercus Mlichensis</i>	II-19	<i>Quercus Mlichensis</i>	II-19
Ash, Green	IV- 9	Elae, Red	I-17	Oak, Overcup	II-21	<i>Quercus nigra</i>	II-19	<i>Quercus nigra</i>	II-19
Ash, Mountain	III-23	Elae, Slippery	I-17	Oak, Oak	II-21	<i>Quercus palustris</i>	II-21	<i>Quercus palustris</i>	II-21
Ash, Red	IV- 9	Elae, White	I-17	Oak, Post	II-17	<i>Quercus Phellos</i>	II-23	<i>Quercus Phellos</i>	II-23
Ash, Swamp	IV-11	<i>Eucalyptus Europaea</i>	III- 3	Oak, Red	II-21	<i>Quercus prietana</i>	II-19	<i>Quercus prietana</i>	II-19
Ash, Water	IV-11	<i>Fagus Americana</i>	II- 5	Oak, Scarlet	II-21	<i>Quercus rubra</i>	II-21	<i>Quercus rubra</i>	II-21
Ash, White	IV- 7	<i>Fagus Arrogans</i>	II- 5	Oak, Spanish	II-21	<i>Quercus salicifolia</i>	II-17	<i>Quercus salicifolia</i>	II-17
Astelia triloba	I- 3	Fir, Balsam	IV-21	Oak, Swamp White	II-19	<i>Quercus sartorii</i>	II-21	<i>Quercus sartorii</i>	II-21
Azara	II-11	<i>Prunus Americana</i>	IV- 7	Oak, Water	II-23	<i>Quercus scaberrima</i>	II-17	<i>Quercus scaberrima</i>	II-17
Azara, Large-toothed	II-11	<i>Prunus pensylvanica</i>	IV-11	Oak, White	II-17	<i>Quercus velutina</i>	II-21	<i>Quercus velutina</i>	II-21
Balm of Gilead	II-13	<i>Prunus padus</i>	IV- 9	Oak, Yellow Chestnut	II-19	<i>Rubus Pensylvanica</i>	II-21	<i>Rubus Pensylvanica</i>	II-21
Bamboo	I- 9	<i>Prunus quadrangularis</i>	IV- 9	<i>Ostrya Virginiana</i>	II- 3	<i>Sassafras albidum</i>	II- 9	<i>Sassafras albidum</i>	II- 9
Bamboo, Small-leaved	I- 9	<i>Prunus umbellifolia</i>	IV-11	<i>Ostrya Virginiana</i>	II- 3	<i>Sassafras albidum</i>	II- 9	<i>Sassafras albidum</i>	II- 9
Bane	II- 5	<i>Prunus viridis</i>	IV- 9	<i>Papaw</i>	II- 5	<i>Sassafras albidum</i>	II- 7	<i>Sassafras albidum</i>	II- 7
Bane, Water	II- 3	Frigate Tree	III- 5	<i>Pestenaceum</i>	I- 5	<i>Sassafras albidum</i>	II- 7	<i>Sassafras albidum</i>	II- 7
Barisella alba	I-21	<i>Gleditschia triacanthos</i>	III-03	<i>Picea alba</i>	IV-23	<i>Sassafras albidum</i>	II- 7	<i>Sassafras albidum</i>	II- 7
Barisella bracteata	I-21	<i>Gymnocladius Canadensis</i>	III-21	<i>Picea nigra</i>	IV-23	<i>Sassafras albidum</i>	II- 9	<i>Sassafras albidum</i>	II- 9
Barisella heterophylla	I-21	Hickory	I-19	<i>Picea rubens</i>	IV-23	<i>Sassafras officinale</i>	I- 7	<i>Sassafras officinale</i>	I- 7
Barisella nigra	I-21	Hickman	IV-21	Pigmy	IV- 5	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisella papillifera	I-21	Hickory	IV- 3	Pine, Georgia	IV-13	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Black	I-21	Hickory, Brown	IV- 5	Pine, Gray	IV-13	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Green	I-21	Hickory, Swamp	IV- 3	Pine, Jersey Scrub	IV-17	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Co. -leaved	White	Hickory, White	I-21	Pine, Loblolly	IV-15	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Gray	I-21	<i>Ilex verticillata</i>	I-11	Pine, Northern Pitch	IV-17	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Paper	I-21	Judas Tree	I- 3	Pine, Norway	IV-19	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Papillifera	I-21	Leshkevitchia	IV- 3	Pine, Old-field	IV-15	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Red	I-21	Leshkevitchia, Hop	IV- 3	Pine, Red	IV-19	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, River	I-21	Leshkevitchia, Iron	IV-23	Pine, Southern Yellow	IV-17	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Sweet	I-21	Leshkevitchia, Lake	I-11	Pine, Table Mountain	IV-17	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, White	I-21	Leshkevitchia, Mountain	I-11	Pine, White	IV-15	<i>Sassafras sambrense</i>	I- 7	<i>Sassafras sambrense</i>	I- 7
Barisell, Yellow	I-21	Leshkevitchia, Space	I-11	Pine, Yellow	IV-19	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Bartonia	IV- 5	Leshkevitchia, Verticalis	I- 3	Pine, Sassafras	IV-17	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Black Haw	III- 7	<i>Populus tremuloides</i>	II-25	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Black Walnut	III-25	<i>Populus tremuloides</i>	I- 7	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Box Elder	IV- 7	<i>Populus tremuloides</i>	IV-25	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Buckeye, Field	IV-13	<i>Karstovia Coffea</i>	III-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Buckeye, Ohio	IV-13	<i>Karstovia Coffea</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Buckeye, Sweet	IV-13	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Burring Bush	III- 7	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Buteom	III-03	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Buteom	III-03	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carpinus Corollinae	II- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya alba	IV- 3	Loropetalum chinense	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya amara	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya cordiformis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya glabra	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya laciniosa	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya ovata	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya pinnatifida	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya sativa	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Carya tomentella	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9
Celtis occidentalis	IV- 3	<i>Loropetalum chinense</i>	IV-21	Pine, Sassafras	IV-15	<i>Tilia Americana</i>	I- 9	<i>Tilia Americana</i>	I- 9

Swiss Pp.

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