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Famous TREES

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PECAN TREES AT MOUNT VERNON

MISCELLANEOUS PUBLICATION No. 295
U. S. DEPARTMENT of AGRICULTURE
Aug. 1939

ILLUSTRATIONS

Trees Associated With Notable Persons, Events, or Places

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FAMOUS TREES

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TREES ASSOCIATED WITH NOTABLE PERSONS, EVENTS, AND PLACES

EVERY land, every clime, has its trees, and in the lore of every age tree stories are found.

In the United States there is abundant tree growth of the most useful species. The Nation has been quite literally nurtured in a wooden cradle, and its progress has been largely due to the contributions of the forest. The pioneers cut paths through the wilderness—from east to west and from north to south—and the forest harvest has gone into home and community building.

On all sides there is abundant evidence that forests are essential to civilized man's welfare. The individual tree, however, has an even more intimate part to play in human experience, a part so universal that every country has its famous tree citizens.

Trees by their very nature are landmarks and memorials. They are therefore identified with human happenings. Also, trees, having more than the allotted life span of man, carry their associations through generations of men and women. Thus they often figure not only in biography but also in history.

Trees are loved by all kinds of people. Therefore they are immortalized by poets and artists, and their historical associations are perpetuated by churches and schools, by various organizations and communities.

Several hundred descriptions of, or incidents about trees, taken from reports coming to the Forest Service and from records and library

references[1] are included in this publication. They are from almost every State in the Union and deal with many species. In a complete story of notable trees, however, there would be so many chapters that it is impossible to tell it all at once or for one person to do the telling. The compilation is necessarily incomplete, and many notable tree favorites may have been omitted.

TREES ASSOCIATED WITH NOTABLE PEOPLE

Since one almost invariable element of greatness seems to be a love of nature, trees are found entering into the interests of famous men and women. It is significant that tree stories are associated with many of our Presidents. The first tree lover of them all, Washington, planted many trees, and many other trees are living memorials to him.

Living trees planted by Washington or under his direction at Mount Vernon include tuliptrees, buckeyes, elms, pecans (see front cover), hollies, lindens, hemlocks, mulberries, and others. Trees directly associated with Washington in at least a dozen Eastern States swell the number bearing his name toward the hundred mark.

Next to the Washington Elm in Cambridge (now dead), under which the leader of the American Revolutionary forces assumed command in 1775, probably the most notable Washington trees now living are:

The Washington Elm at Berkeley Springs, W. Va., associated with the surveying days of the young Washington while in the employ of Lord Fairfax. In Washington's journal of this survey, written in 1747, an entry indicates that he was greatly impressed by the medicinal value of certain springs near Berkeley, which, according to tradition, were exciting factors in Indian warfare. After the settlement by white pioneers, Washington planted an American elm at the intersection of the growing town's principal thoroughfare, Washington Street, with another street marking the southern boundary of the grant of Lord Fairfax. The tree today is 21 feet in circumference at its base.

The Washington Elm facing the east entrance to the Senate wing of the United States Capitol, under which the first President watched the building of that structure (fig. 1).

The Washington Elm Grandchild, a descendant of the Washington Elm at Cambridge, Mass., was planted as a Washington Bicentennial tree on the grounds of the State capitol in Hartford, Conn., on March 31, 1933. It was accepted by the Governor of the State, and, having been given good care, is in excellent condition.

A "grandchild" of the Cambridge, Mass., elm now growing on the front lawn of the American Tree Association office building, 1214 Sixteenth Street NW., Washington, D. C.

Among the many descendants of the Washington (Cambridge) Elm are one at Arnold Arboretum, Jamaica Plain, Mass., and "a pedigreed scion" on the campus of the University of Washington at Seattle. A sturdy sapling, propagated from a limb of the Seattle

[1] Acknowledgment is made to Beryl G. Gardner, assistant editor, and Melissa Speer, assistant librarian, Forest Service, for assistance with reference material, to donors of photographs used herein, and to others who have offered helpful criticisms in the compilation of this publication.

offspring, was set out in the university's botanical gardens in April 1930 to replace the Cambridge ancestor when the park department of that city is ready to receive it.

Cogswell Maple, New Preston, Litchfield, Conn. This is said to be the largest maple in Connecticut. The house which stands in its shade was once an inn where George Washington was entertained on one of his trips to Connecticut.

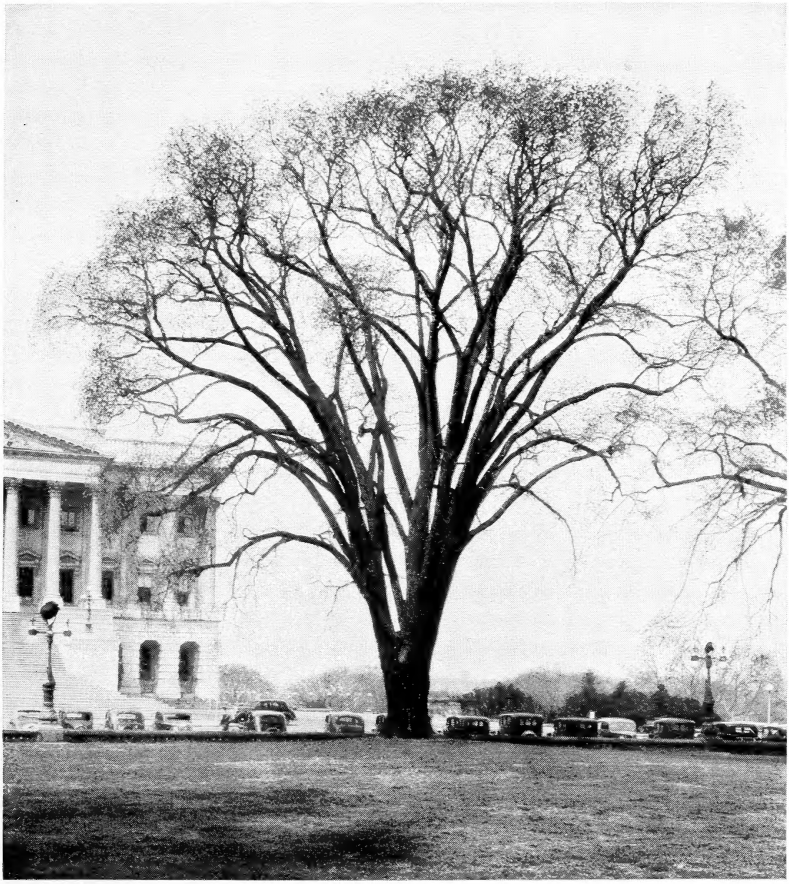

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FIGURE 1.—WASHINGTON ELM, OPPOSITE THE EAST ENTRANCE TO THE SENATE WING, UNITED STATES CAPITOL, WASHINGTON, D. C.

The Great Elm, at Palmer, Mass., from the shade of which Washington addressed his troops 3 days before he took command of the Continental Army at Cambridge, July 3, 1775.

White oak, Gaylordsville, Conn., under whose shade tradition says George Washington held council when on his way to Hartford in September 1780. This tree stands near the Shagticoke Trail. It is owned by the Connecticut Daughters of the American Revolution, who are caring for it. Incidentally, in 1932 Connecticut D. A. R.'s

alone planted more than 6,000 trees at scattered points in the State in honor of the Father of his Country.

Elm near Washington's headquarters at Valley Forge. Beneath this tree there is a marker which bears the following inscription:

> This elm, a scion of a tree planted by George Washington, was brought here and planted in December 1888 by the State Secretary of the Patriotic Order of Sons of America.

Washington Ball Walnut, Maplewood, N. J. Historic walnut on Ridgewood Road, planted beside the Timothy Ball house at the time it was built, in 1743. Here Washington frequently visited his Ball relatives while headquartering at Morristown. On such visits, according to tradition, he tied his horse to an iron ring attached to this tree. This tree is also referred to by George W. Clark, a great grandson of Timothy Ball, as a tree of tremendous size and as a dividing line between the congregations of the Presbyterian Churches, one at Orange and the other at Springfield, N. J., those on the south attending one church and those on the north, the other.

Washington Friendship Tree (horsechestnut) at Bath, Pa. This tree is said to be a memorial to the friendship existing between Gen. George Washington and Gen. Robert Brown in Revolutionary days. On one of General Brown's visits to Mount Vernon, when peace had come, Washington dug from his garden two young horsechestnuts and presented them to his friend, who carried the saplings on horseback over the mountains into the hills of Pennsylvania, where they were planted at the home of General Brown at Bath. Only one of the trees is alive today (fig. 2).

Washington Live Oak at Charleston, S. C. Washington visited Charleston in 1791, and here, so the story goes, was an honored breakfast guest in the beautiful plantation home of the distinguished Pinckney family. He heard the mistress of the household order her gardener to cut down the large oak which obstructed the view from the new portico. Washington, great tree lover that he was, expressed the wish that the tree be spared. It was.

Other presidents were known for their interest in trees.

John Quincy Adams was known as "the tree-planting Mr. Adams." Thomas Jefferson was a well-known tree lover and tree planter. There is a "President's grove" at Fremont, Ohio, the home of Rutherford B. Hayes, nineteenth President of the United States, many of the trees having been christened by former Presidents at times when they visited the park. There are many General Grant trees in the world, planted in his honor during his trip around the world. Theodore Roosevelt is perhaps best known as "the great conservationist" because of his interest in wise use of the forests and other resources.

Among well known trees of the Presidents are:

The John Quincy Adams Elm (fig. 3), on the White House grounds near the east entrance, Washington, D. C., planted during the administration of President John Quincy Adams.

At Wheatland, near Lancaster, Pa., the beautiful and carefully preserved estate of James Buchanan, fifteenth President of the United States, there are a number of fine old trees, notably a beautiful old beech (fig. 4). Wheatland is open to the public as a shrine

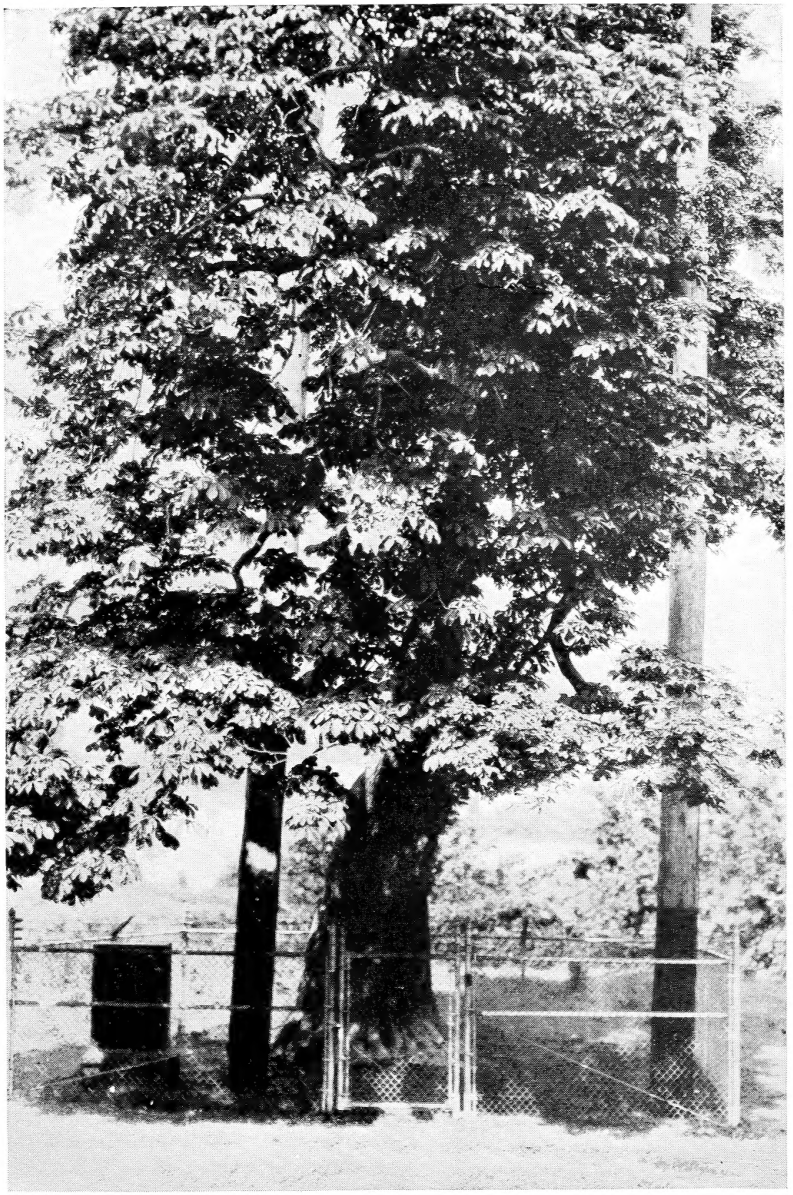

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FIGURE 2.—WASHINGTON FRIENDSHIP TREE, BATH, PA.

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FIGURE 3.—JOHN QUINCY ADAMS ELM ON THE WHITE HOUSE GROUNDS NEAR THE EAST ENTRANCE, WASHINGTON, D. C.

of historic interest. (This story and the picture were contributed by W. E. Weisgerber, Franklin and Marshall College, Lancaster, Pa.)

Grant Elm, Woodstock, Conn., planted by President Grant, July 4, 1870, on the lawn in front of the Woodstock Academy.

Elm from Grant's farm, near St. Louis, Mo., planted near his tomb on Riverside Drive, New York City.

Scarlet oak planted by Mary Lodge McKee, granddaughter of President Benjamin Harrison, on the White House lawn, Washington, D. C.

Famous Indiana Oak, Lafayette, Ind., under which William Henry Harrison once camped for the night while on a momentous journey.

Cottonwood near the State capitol, Topeka, Kans., under which Harrison, McKinley, and Taft made campaign speeches.

The Oak of Two Presidents, William Henry and Benjamin Harrison, in Hamilton County, Ohio, neighbor of the cabin famous in the Log Cabin and Hard Cider Campaign and as the birthplace of the second President Harrison.

FIGURE 4.—FINE OLD BEECH AT WHEATLAND, HOME OF PRESIDENT BUCHANAN. NEAR LANCASTER, PA.

The Hayes Elm, planted by President Hayes on the White House grounds.

Six tall hickory trees flanking the tomb of Andrew Jackson and his wife, Rachel, at the Hermitage, near Nashville, Tenn.

Magnolias brought from the Hermitage and planted by President Jackson on the White House grounds in honor of Rachel, shortly after her death. "Something green—in her memory," as he said (fig. 5).

Jefferson Pecans at Mount Vernon, Va. (front cover). Thomas Jefferson and George Washington were kindred spirits in their love of trees. The two pecan trees on the lawn southeast and east of the mansion at Mount Vernon are an outstanding illustration of this congeniality. They were grown from nuts given to Washington by Jefferson and planted by the former on March 25, 1775. They are the oldest trees now standing on the estate.

F-321116

FIGURE 5.—MAGNOLIAS PLANTED BY PRESIDENT JACKSON ON THE WHITE HOUSE GROUNDS, WASHINGTON, D. C.

The Jefferson Pecan in the Georgetown Convent grounds, District of Columbia, grown from a nut given by Jefferson to the former owner.

The Lincoln Oak, on the Rock Spring Farm, Lincoln's birthplace, at Hodgenville, Ky.

The Lincoln Oak, southern red oak (*Quercus rubra* L.), in Rockport, county seat of Spencer County, Ind. This splendid oak stands

a short distance from the point on the Ohio River at which Abraham Lincoln, at the age of 19, embarked on the first great adventure of his life, going with Allen Gentry on a flatboat to New Orleans to market the Gentry produce.

The Lincoln Elm, in the northern part of Spencer County, Ind., in the State park where Lincoln's mother is buried.

The Lincoln Memorial Hackberry, Decorah, Iowa, was planted in memory of Abraham Lincoln by John Finn on April 27, 1865, the day that Governor Stone of Iowa set aside as a day of mourning for Lincoln. On that day Finn went into the woods, found a small hackberry tree, and transplanted it to the parking on the street in front of his home. It has grown to be one of the most magnificent trees in Iowa.

Lincoln Oak, Litchfield, Conn. This oak was grown from an acorn from a tree at Lincoln's grave in Springfield, Ill. It was planted in front of the library as part of the bicentennial celebration of the town in 1920.

McKinley Elm, Woodstock, Conn. This tree was planted in Roseland Park in 1897 in honor of President McKinley.

McKinley Oak, Litchfield, Conn., planted in East Park by Mary Floyd Tallmadge Chapter, D. A. R., in memory of President McKinley, who was a great lover of trees.

McKinley Scarlet Oak, planted near walk leading to Executive Offices of the White House, Washington, in 1898.

The Monroe Pine, at Ashlawn, near Charlottesville, Va. This great red pine was brought from France by President Monroe and planted in the center of his garden.

The Monroe Black Walnut, campus of University of Virginia, Charlottesville, near the building which was the home of the fifth President of the United States before he moved to Ashlawn.

The Russo-American Oak, planted on the White House grounds, Washington, by Theodore Roosevelt, is from an acorn of an oak growing near Peterhof, Union of Soviet Socialist Republics, which, in its turn, was from an acorn of an oak that shaded the tomb of Washington. United States Ambassador Hitchcock brought the Peterhof acorn from Russia, now the Union of Soviet Socialist Republics.

Roosevelt Oak, East Haven, Conn. This tree, presented by Theodore Roosevelt, while President, was planted on Arbor Day, May 1, 1908, to mark the site where General Lafayette encamped on the green.

A Scotch elm, which is located near the hospital of Michigan State College, East Lansing, was planted by President Theodore Roosevelt in June 1907, in connection with the fiftieth anniversary of this institution.

Lafayette was so loved and admired in this country as a friend of the Colonies, of the young Republic, and of its first President, that many landmarks associated with him are found in the East. Lafayette trees include:

Lafayette Elm in Kennebunk, Maine, and one near Ware, Mass.

The Lafayette Swamp Bay in front of Nelson House at Yorktown, Va., which Lafayette is reported to have planted.

Lafayette White Oak, near Bradley House, Southington, Conn., meeting place of Lafayette with his troops, while on his way to meet Washington's army.

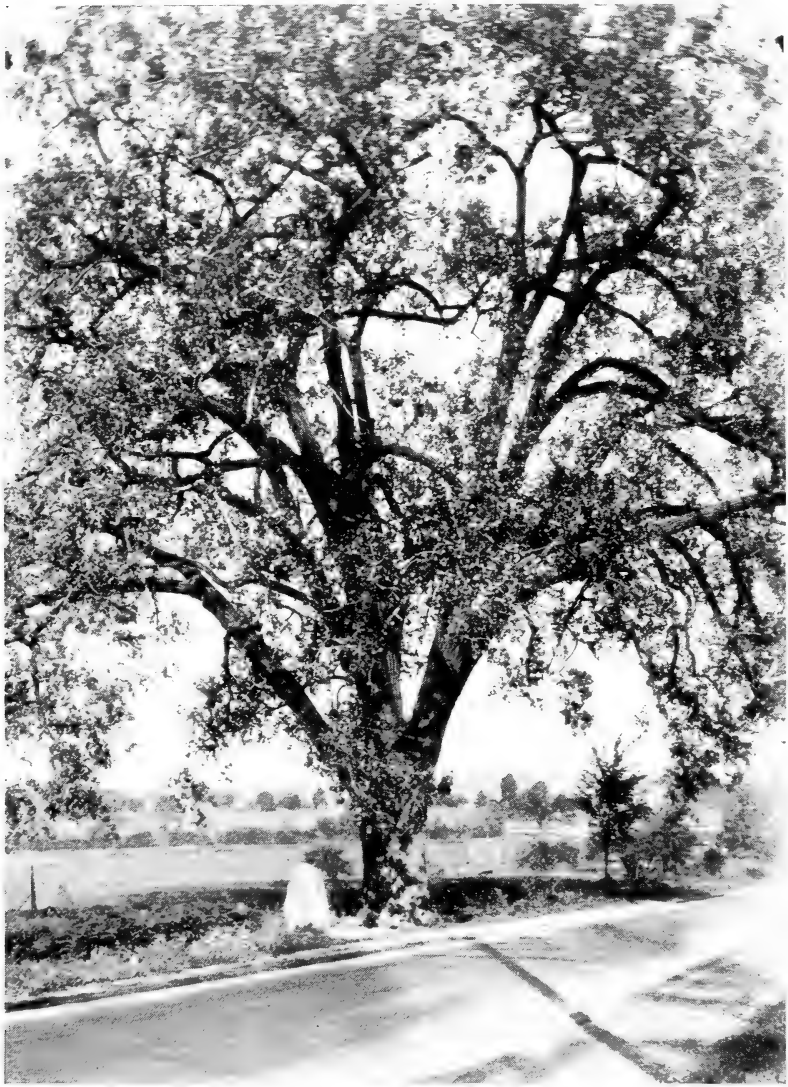

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FIGURE 6.—GENERAL LAFAYETTE TREE (BALSAM POPLAR), ON HAMILTON STREET, ROUTE 20, JUST WEST OF GENEVA, N. Y.

Lafayette, or Geneva Century Balsam Poplar, on Hamilton Street, Route 20, just west of Geneva, N. Y. This tree (fig. 6) shades the spot to which the militia and citizens of Geneva came to welcome General Lafayette on the occasion of his visit to that city on June 8, 1825. A tablet has been erected at the base of the tree by the Seneca Chapter, D. A. R. (See Trees notable for unusual size or age, p. 89.)

Lafayette Sycamore, near Baltimore Pike, on a hill 200 yards east of the Brandywine Baptist Church, near Chadds Ford, Delaware

County, Pa., is close to the house occupied by General Lafayette as his headquarters before the Battle of the Brandywine, September 10 and 11, 1777.

Trees intimately associated with other famous people include the following:

CALIFORNIA

Sir Joseph Hooker Oak, at Chico, named for the famous English botanist, who pronounced it "the largest oak in the world." In reality it is only among the largest. (See Trees notable for unusual size or age, p. 69.)

Kit Carson Tree (juniper), which stood at the summit of Carson Pass over the Sierra Nevada Mountains. This tree has been cut down, but the section bearing Carson's name is preserved at Sutter's Fort, Sacramento. Kit Carson, American hunter and scout, accompanied John C. Fremont on expeditions, took part in the Mexican War, and as Indian agent for many years at Taos, N. Mex., exercised a restraining influence over the warlike Apaches and other tribes. During the Civil War he rendered valuable aid to the Federal cause in the Southwest. Often called "the Nestor of the Rocky Mountains," Kit Carson occupied, in the later period of American pioneer history, a position somewhat similar to that held by Daniel Boone earlier, as the typical frontier hero and Indian fighter.

The Peter Lassen Pine, about 5 miles southeast of Susanville, close to which, the story goes, Peter Lassen was killed by Indians.

CONNECTICUT

Calhoun Elm, Litchfield. John C. Calhoun, South Carolina statesman, planted this tree on Prospect Street, when he was a student at the Litchfield Law School, the first law school in the United States.

Colvorcoresses Oak, Litchfield. This tree was planted in East Park in commemoration of the return of Rear Admiral George P. Colvorcoresses from the Battle of Manila Bay (May 1, 1898), where he was executive officer on Admiral Dewey's flagship.

Sarah Whitman Hooker Elm, West Hartford. This elm was planted in front of the house which came into possession of the Hookers in 1773, by a slave of the Hooker family who was later given his freedom. It is one of the largest elms in the State.

Napoleon Willow Grandchild, Fairfield. A willow, which became a favorite of Napoleon, had been planted on St. Helena by the governor of the island. Captain Sheffield, of Fairfield, once visited St. Helena and brought home several willow cuttings. One grew into a beautiful big tree but was blown down in a thunderstorm in 1901. The present willow came from a cutting of the Sheffield tree and is therefore a grandchild of the St. Helena willow. It stands on the property of Egbert Hadley, Harbor Road, Southport.

DISTRICT OF COLUMBIA

The Cameron Elm, an American elm, south of the House wing of the United States Capitol, named for United States Senator Cameron, who pleaded for its life when it was about to be removed in the laying of the curb (fig. 7).

F-321127

FIGURE 7.—THE CAMERON ELM, SOUTH OF THE HOUSE WING, UNITED STATES CAPITOL, WASHINGTON, D. C.

Maple planted in memory of Juliette Low, founder of the Girl Scouts of America, at Eighteenth Street and New York Avenue, NW, Washington, D. C., by the Girl Scouts of the District of Columbia.

J. Sterling Morton Elm, United States Capitol Grounds, planted in memory of the founder of Arbor Day, by Chief Forester R. Y. Stuart, in 1932. Another living memorial to J. Sterling Morton is an elm planted by the Nebraska Society at 1214 Sixteenth Street, NW, Washington, D. C., headquarters of the American Tree Association.

IOWA

Buffalo Bill Elm. Near the old river town of LeClaire, in the shade of this tree, William F. Cody played when a boy. This elm is known also as the "Green Tree Hotel", because it was the rendezvous of river men who came to LeClaire in search of employment. In its grateful shade they congregated, cooked their meals, and spread their blankets, making its shelter their home in time of unemployment.

KANSAS

The Custer Elm, at Council Grove, under which General Custer camped one night in 1867, while on his way with his famous Seventh Cavalry to quell an Indian uprising along the old Santa Fe Trail.

Kit Carson Elm, near Halstead on the bank of Black Kettle Creek, served as a marker for the Arapahoe and Osage Indian hunters. It was here that Kit Carson and his band of pioneers, camping for the night, were surprised by the Comanche Indians.

MARYLAND

The Clara Barton Centennial Oak, at Glen Echo, was planted by a representative of the American Forestry Association, Easter Sunday in 1922, in front of the house where the founder of the American Red Cross died on Easter Sunday 1912. Clara Barton was born on Christmas Day, 1821, in Massachusetts.

NEW YORK

Friendship Elm (American elm), planted in 1860 on the Mall in Central Park, New York City, by King Edward VII, then Prince of Wales.

Friendship Elm (English elm), planted by the Duke of Windsor, then Prince of Wales, in Central Park, New York City, in 1920. It is 100 feet from the spot where his grandfather planted an American elm in 1860.

European green beech planted by the Queen of the Belgians, in Central Park, New York City, in 1919, as a token of Belgium's enduring affection for the people of the United States.

The Wayne Black Walnut, or Black Walnut of Stony Point, takes its name from association with Mad Anthony Wayne, Revolutionary hero, and its location at Stony Point, N. Y. Also, the belief has been handed down that, under this old walnut tree, the patriots of Stony Point were paid by Washington after the battle. There seems to be no reason to doubt that the tree was there at the time, and the shade of its branches must have made the spot most fitting for such an occasion on a hot July day (*71, pp 82–83*).[2]

[2] Italic numbers in parentheses refer to Literature cited, pp. 111–115.

NORTH CAROLINA

Blackboard's (Teach's) Oak, at Oriental, associated with that daring pirate, Edward Teach.

PENNSYLVANIA

John Bartram's Cypress, brought in his saddlebag from a Florida swamp to the botanical garden near Philadelphia.

FIGURE 8.—JOHN GOODWAY SYCAMORE, NEAR THE SITE OF FORT GILCHRIST, OF REVOLUTIONARY TIMES, 2 MILES WEST OF LINGLESTOWN, PA. (COURTESY OF C. A. REED, BUREAU OF PLANT INDUSTRY.)

The John Goodway Sycamore (fig. 8), near the site of Fort Gilchrist of Revolutionary times, 2 miles west of Linglestown, Dauphin County, associated with John Goodway, last of the friendly Indians

in the region about Harrisburg. (See Trees notable for unusual size or age, p. 93.)

Tradition has it that a grove of giant hemlocks at Stenton, Germantown, once the country place of James Logan, William Penn's secretary, was planted by Penn himself. This tradition has not been authenticated, but the trees are very old (*82*).

TEXAS

Davy Crockett Tree, an ancient oak at Crockett, under which Davy Crockett is said to have camped during his journey from the States to assist Texas in its struggle for freedom from Mexican rule. Not long after he camped there he met death in the historic battle of the Alamo.

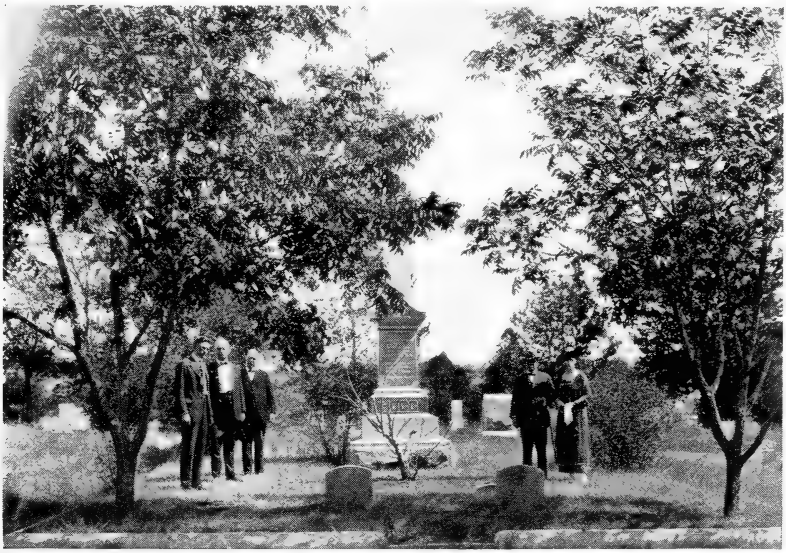


FIGURE 9.—NUT TREES PLANTED AT THE GRAVE OF GOVERNOR HOGG, IN AUSTIN, TEX., IN COMPLIANCE WITH HIS DEATHBED REQUEST THAT SUCH A MONUMENT RATHER THAN ONE OF STONE BE ERECTED TO HIM. (COURTESY OF C. A. REED, BUREAU OF PLANT INDUSTRY.)

The Governor Hogg Pecan (fig. 9). The governor's last wish was that "no monument of stone or marble" be placed at his grave, but instead that there be planted—

at my head a pecan tree and at my feet an old fashioned walnut; and when these trees shall bear, let the pecans and walnuts be given out among the plains people of Texas so that they may plant them and make Texas a land of trees.

His wish is being carried out. The first nuts were saved in 1926 and planted at College Station. Each year since, the nuts have been gathered and planted in nursery rows. As soon as the young trees become large enough to transplant, they are dug up and distributed, one each, first to county high schools, next to other high schools, and last to county boards for planting on courthouse lawns.

The Sam Houston Pecan Tree. Under this famous tree, standing in the well-kept yard of Sam Houston's old home at Huntsville,

General Houston smoked the peace pipe with his Indian friends "and with his 'paleface' comrades planned many a political campaign." J. L. Clark, Sam Houston State Teachers College, Huntsville, advises that nuts or seedlings from this tree may be had for planting on school grounds, in parks, and in other appropriate places.

Santa Anna's Surrender Tree, immortalized in a noted painting, is the oak under which Gen. Sam Houston lay wounded after the battle of San Jacinto (Apr. 21, 1836) when the captive Mexican General Santa Anna was brought before him. Beneath this tree today stands a granite marker, a gift of San Jacinto Chapter of the Daughters of the Republic of Texas in commemoration of that eventful surrender.

VIRGINIA

The Clay Oak, Hanover County, a post oak to which the "Millboy of the Slashes," Henry Clay, tied his horse when sent on errands to a mill near his birthplace in a district called "the Slashes"—hence the sobriquet. The oak bears a marker to this effect. Though nearly 150 years have passed, the ruins of the dam at the site of the old mill may still be seen. The ground is now occupied by the plant of the Ashland Lumber Co. and may be reached by turning west at the Ash Cake Inn on the Richmond-Washington Highway (*58, p. 4*).

Stratford Horsechestnut, Stratford-on-the-Potomac, family home of the Lees, mentioned in Gen. Robert E. Lee's diary as having been planted by his mother, Anne Carter Lee.

Maury Walnut (black), Fredericksburg, proudly spreads its branches over the home of the "Pathfinder of the Seas," Matthew Fontaine Maury. (See also Trees that have had special protection, p. 59.)

The Martha Custis Yew, at Williamsburg, an English yew, which tradition claims was planted by Martha Custis while still the wife of Daniel Parke Custis. It is in the park area of the Eastern State Hospital (*58, p. 21*).

WISCONSIN

"The Forest of Fame," in Mount Vernon, Wis., was started in 1916 by the late John Sweet Donald, one-time Secretary of State and professor of agricultural economics at the University of Wisconsin. Within the forest boundaries are trees from birthplaces of former Presidents of the United States, famous generals of the world, and personages associated with religion, science, music, agriculture, commerce. While Professor Donald was Secretary of State he began the Forest of Fame by purchasing a field which had once been a beautiful forest and planting therein trees from George Washington's Mount Vernon estate. The first trees were planted on Arbor Day, 1916.

TREES ASSOCIATED WITH THE BUILDING OF THE NATION

If a contest were to be held in the naming of the three best-known trees associated with the early history of our country, it is likely that the winners would be as follows:

The Penn Treaty Elm, at Shackamaxon, Pa., which is now in the Kensington section of Philadelphia, memorable as the place where William Penn concluded his famous treaty with the Indians in 1682.

The elm was nearly 300 years old when felled by a storm in 1810. It is perpetuated to the fourth generation, there being seven of its descendants growing in one place, the campus of Haverford College, Haverford, Montgomery Co., Pa.

The Charter Oak, Hartford, Conn., which stood in front of Governor Wyllys' mansion, built in 1638. The charter of the Connecticut Colony, granted by King Charles II in 1662, is supposed to have been hidden in the oak by a patriot when Sir Edmund Andros demanded its surrender in 1687, at the command of King James II. The charter served Connecticut as a constitution from 1662 to 1816 and conveyed to the colony all the land "from the said Narragansett Bay on the east to the South Sea on the west." The tree blew down in a light gale on August 21, 1856. The hole which concealed the charter had been enlarged enough to hold 25 men. Pieces of the wood were made into gavels, picture frames, and even chairs, one of which stands in the senate chamber of the State capitol.

A seedling of the Charter Oak stands in the Israel Putnam Memorial Camp Ground, Redding, Conn. A marker near it reads:

> Charter Oak. "A chip off the old block." This tree sprang from an acorn of the famous Charter Oak of Hartford in which the charter of Connecticut was hidden when Sir Edmund Andros, the royal governor, threatened the liberties of the people.

There is another descendant of the Charter Oak, in Bushnell Park, Hartford, and numerous other descendents may be found in Connecticut. One was planted near the Lincoln Memorial, Washington, D. C., by a president of the Kiwanis International.

The Cambridge Elm, under whose branches General Washington took command of the Continental Army on July 3, 1775. One writer says of it:

> This tree, probably the most famous of American elms, was undoubtedly of the original forest growth, and was in its maximum glory when the American Revolutionary leaders met under its branches.

October 27, 1923 (by coincidence the birthday anniversary of Theodore Roosevelt), witnessed the fall of this great American tree, estimated to be 204 years old at the time. Many of its descendants have been planted throughout the country to perpetuate its fame. (See Washington Elm Grandchild, and other descendants of Washington (Cambridge) Elm, Trees associated with notable people, pp. 2 and 3.)

In addition to these well-known tree veterans, which have gone their way but whose descendants perpetuate the name, there are others in the same class that should be better known than they are. Among these are the following:

ARKANSAS

The Arkansas Council Oak, at Dardanella, under which an important treaty between the Indians and the whites was negotiated, relative to the adjustment of territorial boundaries (fig. 10).

Liberty Tree, a memorial maple planted at Arkadelphia, by the Daughters of the American Revolution, in soil brought from many parts of the world.

FIGURE 10.—THE ARKANSAS COUNCIL OAK, AT DARDANELLA, ARK.

CALIFORNIA

Fremont Oak, near Alameda, under which Captain Fremont camped with 62 men, including 5 Delaware Indians and the redoubtable Kit Carson.

Hangman's Tree, in the old mining town, Second Garrote, near Groveland, Tuolumne County, said to owe its name to its misshapen ugliness. Groveland was first called First Garrote because a man was garroted there.

The Junipero or Vizcanio-Serra Oak, which stood near the gateway of the Presidio of Monterey. Under it the ceremony of taking possession of California for Spain was enacted. The tree was named for Padre Junipero Serra, leader of the Franciscans who established

and maintained the chain of missions along the Pacific coast, who performed the ceremony of transferring California. The tree died in 1905, but the trunk is preserved in the rear of the mission church of San Carlos de Monterey.

Kit Carson Juniper. (See Trees associated with other famous people, p. 11.)

The Sailor's Sycamore (*Platanus racemosa*), at the corner of Milpas and Quinientos Streets, Santa Barbara, was, according to tradition, used as early as 1800 by sailing masters to sight their anchorage as they came into port. It has been preserved through the efforts of the Daughters of the American Revolution.

The Treaty of Capitulation Oak, at Verdugo, is a landmark of the old Spanish days. Under or near it was signed the treaty of capitulation between the Americans and Spanish on January 13, 1847.

CONNECTICUT

1812 Elms, Litchfield. These trees were planted by soldiers stationed at the former Cables place during the War of 1812. They are found on the continuation of West Street.

Oliver Ellsworth Elms, Windsor. It was a custom during the period just after the American Revolution to plant 13 trees to commemorate the original colonies. Oliver Ellsworth, one of the framers of the Constitution and member from Connecticut of the first United States Congress, planted 13 elms at his home in Windsor, of which only 2 remain. The Ellsworth homestead, built about 1740 on land bought by the Ellsworths in 1665, remained in the possession of the family until 1903, when the descendants of Oliver Ellsworth presented the property to the Connecticut Daughters of the American Revolution. The house was named Elmwood from the elms which Oliver Ellsworth planted and named for the original colonies.

Revolutionary Elm, Redding, near the center of Fairfield County. Near this elm stood the home of Widow Sanford, where Continental officers banqueted in 1779.

The Sentinel Elm, Sharon, near western border of Litchfield County. The Sentinel Elm is so called because it stands near the old stone house in Gay Street, which, tradition has it, was used as a hiding place for arms and ammunition during the American Revolution.

Signpost Elm, Litchfield. This elm was used as the town signpost for many years after the settlement of Litchfield in 1720.

South Windsor Elms, tradition has it, were planted by British soldiers who were interned there during the Revolution.

Whipping-Post Elm, Litchfield. This tree, standing at the corner of North and West Streets, near the county jail, was used as a whipping post as late as 1815. When official whippings took place, the tree was small enough so that the culprit's arms stretched around it and his hands were tied together. It now has a circumference of 11 feet 9 inches at breast height.

Woodstock Elms, about the Revolutionary Smith Tavern, where the last slaves kept in Woodstock died.

Bolleswood Hemlocks, New London. Bolleswood was deeded to Thomas Bolles of New London by Owaneco, Sachem of the Mohegan Indians, in 1693. A short time ago the estate was given to Connecticut College as a part of its arboretum. It has remained practically

untouched since the days when the Indians held council there, and it contains a grove of ancient hemlocks, some of which are 450 years old.

Mulberry tree, Guilford. In 1760 half an ounce of mulberry seed was sent to each parish in the colony to encourage the raising of silk worms. A number of these trees in Guilford gave Mulberry Point its name.

The Connecticut Constitutional Oaks were presented by the late Senator Joseph R. Hawley, of Hartford, to each delegate of the Constitutional Convention of Connecticut in 1902. He requested them to plant these trees in their respective towns as a reminder of the purposes of the convention and of the friendships made during the session. The State librarian made inquiries in 1927 regarding the fate of the 168 trees that were planted and received 105 replies indicating 69 living, 14 dead, and 22 unrecorded. The trees are not, as many suppose, seedlings of the Charter Oak. They are all red oaks, while the Charter Oak was a fine specimen of white oak.

1812 White Oak, East Glastonbury. According to tradition, this white oak on the New London turnpike was used as a target by American soldiers in 1812 when they marched to New London. Also, under it the evangelist Whitfield preached.

White Oak, Gaylordsville. (See Trees associated with notable people, p. 3.)

Great Oak, Double Beach, Branford. This huge old tree was a landmark and council tree at the time of the settlement of Branford, in 1640.

Oldest Inhabitant, Fairfield. An oak standing on Greenfield Hill, above the Pequot swamp, has this title. It sheltered first the red men and then the white settlers. In 1778 a band of Redcoats encamped under this oak and made their plans to destroy the village. In 1790 the ministers of the established religion in Connecticut met with Timothy Dwight in this place.

Primeval Oak, Litchfield. This tree is said to be a primeval oak; under it the last bear roaming at large in Litchfield was killed.

Revolutionary Oak, Litchfield. This oak was planted in East Park by the Mary Floyd Tallmadge Chapter, D. A. R., in memory of Litchfield's Revolutionary soldiers.

Westport Oak, Fairfield County. This oak stands at the corner of Compo Road and Gorham Avenue on the route taken by the British on their march to Danbury. This march took place between April 25 and 28, 1777, when General Tryon raided many places in and near Danbury.

Hale Pear Tree, South Coventry. This tree, which is still bearing fruit, was planted about 1750 by Richard Hale, father of Nathan Hale, the American spy who was hanged by the British on September 22, 1776.

Connecticut Sycamore, Litchfield. This tree stands in front of the Catholic Church and is the last of 13 sycamores planted by Oliver Wolcott and named for the original colonies. This is the one named for Connecticut. Oliver Wolcott was a signer of the Declaration of Independence and a Governor of Connecticut.

1812 Sycamore, Fairfield. In 1915 a peace feast was held in Fairfield, and an ox was barbecued under this tree. This sycamore is still standing and is in a flourishing condition.

Revolutionary Sycamore, Danbury. This sycamore was standing at the time of the settlement of Danbury in 1685 and marked the

west boundary of the town on Wooster Street. It was on the line of retreat of the British to Ridgefield after they had burned Danbury.

DISTRICT OF COLUMBIA

Signal Station Cherry Tree, in center of Fort Stevens Park on Georgia Avenue, Washington. Near this tree President Lincoln watched the battle of Fort Stevens, when the Confederates under Gen. Jubal A. Early threatened the city of Washington in June 1864. Beneath this tree are many white markers of the graves of soldiers who fell there.

Treaty Oak in the old Dean estate on Temple Heights, at the intersection of Florida and Connecticut Avenues, Washington, D. C. (fig. 11). Under this tree Chief Mannacasset, of the Anacostan Indian

F–321125

FIGURE 11.—THE TREATY OAK, TEMPLE HEIGHTS, AT FLORIDA AND CONNECTICUT AVENUES, WASHINGTON, D. C.

Tribe, had his wigwam and negotiated many treaties with other tribes and with the white men.

Tradition has it that among the many captives taken by Mannacasset were a young mother and her daughter. The chief spared their lives but sent forth a decree that under penalty of death the woman must not wander beyond the shade of the oak which overspread the hut in which she lived.

Shortly after the death of Mannacasset the treaty for the purchase from the Indians of the site, which is now within the National Capital, was signed beneath the branches of this majestic oak. Several homes were offered the captive, but she preferred to remain beneath the shelter of the sturdy oak. In appreciation of her sufferings, a tract of ground 17½ acres in extent was assigned to her as "The Widow's Mite," and to this day, this property (including also several blocks adjacent) traces its deeds to the "Widow's Mite."

Lincoln Oak. A white oak, just off the Bladensburg Road and inside the District line at Fort Lincoln, marks the site of the Battle of Bladensburg in 1814, where troops from the city of Washington awaited the British. Abraham Lincoln when President, visited the fortifications and drank from the spring beneath the tree. Ten feet away from the tree is the springhouse, and a little more than 25 feet from its door begin the breastworks of Fort Lincoln. This tree has five or six main limbs, one so large it appears as if the trunk itself had decided to change its course. From these main limbs, 20 lesser branches grow and spread (fig. 12).

Glebe Oak, Rock Creek Cemetery, Washington, D. C. (See Trees associated with religion, p. 51, also fig. 25.)

FLORIDA

De Soto Oak, in the grounds of the Tampa Bay Hotel. De Soto, who became governor of Florida in 1539, is said to have been very fond of this oak, and in its shade he is believed to have made a treaty with the Indians. More than 350 years later, during the Spanish-American War, Gen. Nelson A. Miles made his headquarters beneath the branches of this venerable tree.

Santa Rosa Live Oak Grove, 30,000 acres on and near Pensacola Bay, set aside as a forest reserve by the United States Navy Department in 1827 for the supply of ship timbers, under an act authorizing "proper measures to preserve the live oak timber growing on the lands of the United States," etc. A small part of the original "forest reserve" is still owned by the United States Government as a naval reservation.

GEORGIA

Great live oaks on St. Catherine's Island, coast of Georgia, first national naval forest, purchased by the Government in 1799. The timber in *Old Ironsides* was largely from St. Catherine's.

Treaty Poplar of Indian Springs, Butts County, a monument to two famous treaties made in the immediate neighborhood between the United States and the Indians.

F-321124

FIGURE 12.—LINCOLN OAK, WASHINGTON, D. C.

IDAHO

Mullan Tree (western white pine) in the Coeur d'Alene National Forest, bears the inscription, "MR July 4, 1861," a marker for the military road to the building of which Captain Mullan was assigned. From the date, the canyon which the road followed received its name, "Fourth of July Canyon." It is known to all who travel the Yellowstone Trail (fig. 13).

ILLINOIS

Indian trail trees.

Back and forth across the vast extent of the United States, there once existed a great network of Indian trails. Some of these were important routes of travel, linking trade centers of the various tribes. Others were hunting trails,

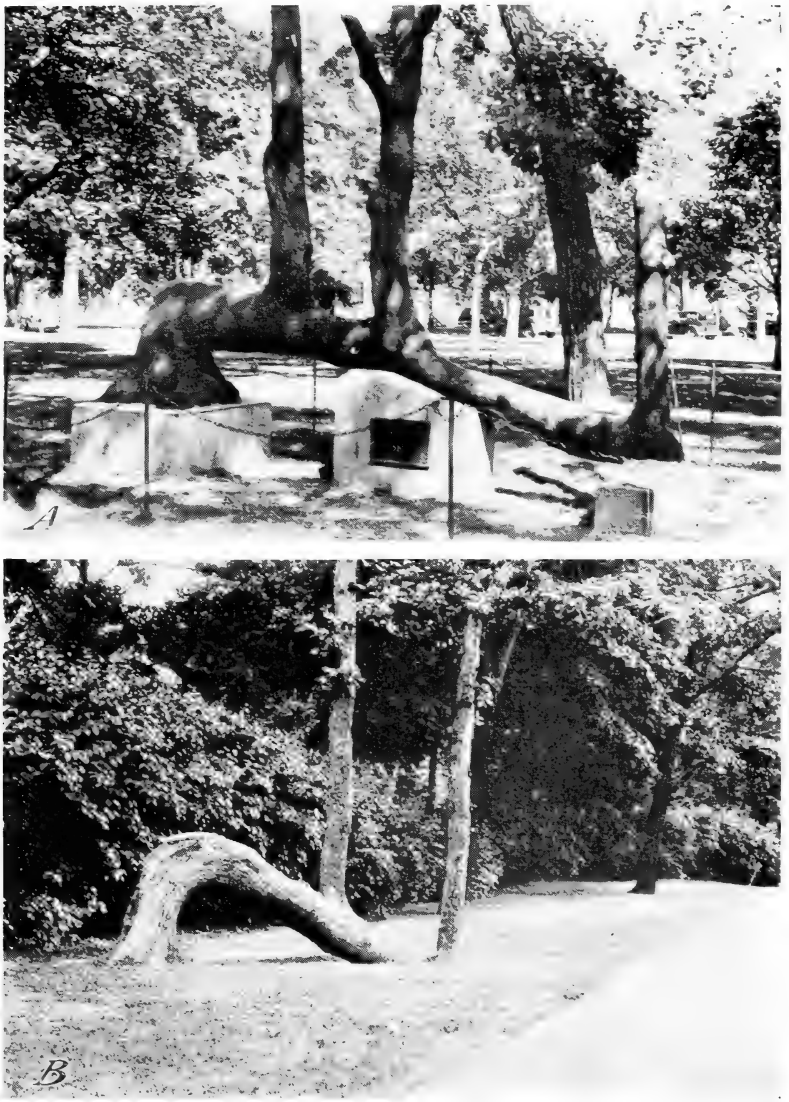
F-150067

FIGURE 13.—THE MULLAN TREE (WESTERN WHITE PINE), ON THE COEUR D'ALENE NATIONAL FOREST, IDAHO.

fresh-water trails, or trails of raiding and warring parties. As time moved on, the tread of the soft moccasined feet gave way to the rumble of wagon wheels, and these in turn to the gleaming rails and concrete roads of modern streamlined train and motor traffic.

Birch-bark canoes no longer line the banks of the Mississippi. The Indian campfire has given way to the smokestack. Where once the red man pitched his wigwam, there rise tall apartment houses of steel and stone. The warwhoop of the aborigine has been replaced by the auto siren and the shrill whistle of the lightning express train. But as the stone age was transformed into the machine age, a few remnants of the past remained standing in the shape of old Indian trail trees dutifully pointing out the direction of former routes now followed by the super-highways of the white man.

Indian trail trees are still growing throughout the Mississippi Valley region and in the eastern and southern United States. They are most common, however, in Cook and Lake Counties, Ill., north of Chicago (*49, 50*) (Fig. 14).



F-336339

FIGURE 14.—A, INDIAN TRAIL TREE MONUMENT PLACED BY THE DAUGHTERS OF THE AMERICAN REVOLUTION, AT EVANSTON, ILL., INSCRIBED: "THIS RED OAK WAS A POTTAWATOMIE TRAIL TREE WHICH GREW ON GREEN BAY TRAIL IMMEDIATELY WEST OF CALVARY STATION WHERE IT POINTED TO A LARGE INDIAN VILLAGE LOCATED ON AND EAST OF THE SITE OF BOWMANVILLE." B, THIS TRAIL TREE HAS TAKEN ROOT AT A POINT OF SECONDARY CONTACT WITH THE GROUND AND HAS CONTINUED GROWING WITH TWO SETS OF ROOTS. IT IS A WHITE OAK AT HIGHLAND PARK, ILL. (COURTESY OF AMERICAN FORESTRY ASSOCIATION.)

INDIANA

Miami Apple Tree, near the city of Fort Wayne, at the junction of St. Marys and St. Josephs Rivers, marks the site of the most noted village of the Miami Tribe of Indians.

Constitutional Elm, Corydon, beneath which on June 10, 1816, members of the constitutional convention met to deliberate upon the articles of the organic law to be adopted for the government of the new State of Indiana. It is protected by the citizens of Corydon as one of Indiana's famous historical landmarks.

S-1207-C

FIGURE 15.—COUNCIL OAK, AT SIOUX CITY, IOWA. (COURTESY OF THE EXTENSION SERVICE.)

IOWA

Council Oak (great bur oak) at Sioux City, believed to have been 150 years old when Lewis and Clark saw it on their way to the Pacific coast and there held council with the Indians (fig. 15).

Plow Oak, Exira, the tree that grew around a plow left leaning against the tree by a homesteader who went to the Civil War and never returned.

Peace Tree—a sycamore—initial tree of an aboretum dedicated to the memory of the early pioneers, by its planter, W. H. H. Barker, of Harvey.

KANSAS

Cottonwood in capitol grounds, Topeka. Mustering place for the Twentieth Regiment of Kansas Volunteers which made such a fine record in the Philippines.

Lone Cottonwood, a well-known landmark 6 miles southwest of Meade. Scene of massacre of United States surveyors under Captain Short, by Cheyenne Indians under Chief Medicine Water, August 24, 1874.

Delaware and Wyandotte Maple, at Olathe, under which these Indian tribes made a treaty of peace. (See Trees that have had special protection, p. 56.)

Council Oak, at Council Grove, marks the place of the treaty signed August 10, 1825, between the United States commissioners and the Indians for unmolested use of the Santa Fe Trail across the Great Plains.

Post Office Oak, facing the old Santa Fe Trail at Council Grove. A cache of stone at the base of this tree served as a post office for hunters, trappers, scouts, and overland travelers until 1847.

KENTUCKY

Famous elm at Boonesborough. Under this elm delegates gathered in May 1775, in response to a message sent out to the scattered settlers regarding the desirability of establishing some form of local government and of devising measures to protect the handful of people living west of the Alleghenies and south of the Ohio. The fort was not yet completed so the meeting was held under this giant elm, and here the articles were agreed to for a local government. Under this elm, the first agreement as to the purchase of land in Kentucky was ratified by the House of Delegates on May 27. On May 28 the first recorded church service in the locality was held there, attended by the members of the House of Delegates and perhaps a number of other persons from nearby localities. This must have been an impressive service because all were armed against possible Indian attack.

Naturalization Tree, at Camp Zachary Taylor, under whose branches thousands of aliens took the oath of allegiance upon being mustered into the ranks of the United States Army during the World War.

LOUISIANA

LaFitte Live Oak, Jefferson Parish. Named for LaFitte, the buccaneer, with whom it was associated (fig. 16).

De la Ronde Oaks, sometimes called "Pakenham Oaks," forming a lovely avenue at Chalmette, some 4 miles below the city of New Orleans, are associated with the Battle of New Orleans. The heaviest fighting occurred on parts of the Chalmette plantation. There are two rows—37 on one side, 38 on the other—and 1 tree out of line, a total of 76 trees. The rows are 100 feet apart, with a space 40 feet wide between the trees, for a total length of 1,800 feet. Eight of the trees were measured, the first two being each nearly 20 feet in circumference.

FIGURE 16.—LAFITTE LIVE OAK, JEFFERSON PARISH, LA.

MAINE

King's Pine. A magnificent white pine near Hiram, Oxford County, dates back to the Royal Charter of 1690 granted by William and Mary to the Province of Massachusetts Bay, wherein were reserved to their Majesties all white pine trees having a diameter of 2 feet or more 1 foot above the ground, not on privately owned premises. Similar reservations were later made by George I, Queen Anne, and George II. All such trees, the cutting of which was forbidden without a royal license, were marked with the King's Broad Arrow. The object of this royal protection was to provide material for masts and spars for the British Navy.

MARYLAND

Old Mulberry at Saint Marys City under whose branches, well-authenticated tradition tells us, Calvert made a treaty with the Yaocomicos. The first General Assembly of Maryland convened at Saint Marys City on February 26, 1635, under the branches of this tree. The first mass is believed to have been celebrated here by the Catholics of this little community. This tree fell in 1876, but a handsome monument marks the spot where it stood.

Royal Oak, or Tree of the Lighted Lanterns, in the little town of Royal Oak, west of Easton. During the War of 1812 a British ship came to anchor at night opposite the town of St. Michaels, Talbot County, a few miles from this veteran oak, and opened fire. The inhabitants, who were unprotected, by hanging lighted lanterns in the tops of the high trees, deceived the enemy into mistaking these for the lights of the town, with the result that the shots passed harmlessly overhead.

Annapolis Tuliptree—Liberty Tree—Treaty Tree, a giant tuliptree on the campus of historic St. John's College, at Annapolis. It served as the canopy under which the colonists and Indians made a treaty of peace, probably the treaty agreed upon with the Susquehannocks in 1652. Here, at the beginning of the Revolution, the patriots of Annapolis assembled, and here also the people gathered to celebrate peace. Washington visited it in 1791 and Lafayette in 1824 (*10, v. 26, pp. 472–475; 22; 104*).

MASSACHUSETTS

Old Liberty Elm, in Boston, planted by a schoolmaster long before the Revolution and dedicated by him to the independence of the Colonies, was a favorite meeting place of the patriots. When at last it fell, the bells of all the churches of the city were tolled. An imperishable monument marks the spot.

Elm by the Little Brown House, Deerfield, past which the Indians usually led their captives to a ford in the river and thence to the Mohawk Trail.

Monroe Tavern Elm, Lexington, directly in front of the Old Monroe Tavern, where, on the day of the Battle of Lexington, horses were tied to iron spikes. One of these spikes, over which the bark has not yet closed, may still be seen about 1½ inches below the surface of the tree trunk.

Beaman Oak, Lancaster, marks the place where Gamaliel Beaman, an early settler, built his house in 1659 (*83*, pp. 124–125; *105*, p. 78).

Red Oak, not far from the town square in Grafton, bears on a copper tablet, the following inscription: "Under this tree before the Old Tavern, patriots of the community gathered to pledge their services in the cause of American Independence."

Endicott Pear, Danvers. John Endicott, the earliest pioneer of the Massachusetts settlement under patent, planted this pear tree about 1632.

Abolition Grove, a stand of white pine at Abington, held to be the place where the War between the States began, because in its shade speeches in the cause of abolition were delivered.

Charlemont Buttonwood (*Platanus occidentalis* L.) Charlemont, not far from where the first pioneer settler of the town perished at the hands of Indians.

Deerfield Buttonwood (*Platanus occidentalis* L.) near which "in the Stebbins House, seven men, besides women and children, held at bay one hundred and forty Indians under a French officer of the line, for three hours." (According to an inscription on a marker.)

MICHIGAN

Treaty Basswood of Grosse Ile, under whose branches, on July 6, 1776, a treaty was signed, conveying the island to two merchants of Detroit, who purchased it for a little money, some blankets, and some tobacco. Tecumseh, "the Torch of the Northwest", was one of the chiefs who signed the document.

Republican Party Oaks, at Jackson. According to a History of the United States from the Compromise of 1850 (vol. 2, p. 48), by James Ford Rhodes:

> "In response to a call signed by several thousand leading citizens of Michigan, for a State mass meeting of all opposed to slavery extension, a large body of earnest, intelligent, and moral men came together at Jackson, Mich., on the 6th day of July (1854). The largest hall was not sufficient to accommodate the people, and, the day being bright, the convention was held in a stately grove in the outskirts of the village." The story goes on to tell that among other momentous recommendations and resolutions, the members of this convention decided to be known as "Republicans."

Royal Oak (a white oak), on what was the Indian trail leading from Detroit to the village of Pontiac. It is a tradition that beneath this oak Chief Pontiac and representatives of another tribe had an unfriendly meeting. This oak has figured also as a boundary tree.

Twin Oaks, on the western end of Juniper Hill in Walter J. Hayes State Park near Jackson, were probably Indian trail markers. They can be seen for some miles to the west and east and south, and from beneath their shade one sees much of the surrounding country.

MINNESOTA

Beech of Great Cloud Island, called by the Indians "medicine wood," signifying "simply miraculous or wonderful tree." Mentioned in a journal of the Leavenworth expedition of 1819 to establish Fort Snelling. This is the only known beech tree within the borders of Minnesota.

MISSISSIPPI

Crawford Oak at Biloxi is famous as a tree under which Indians roasted their oysters. Tradition also says that Jean Lafitte and his band of pirates buried their treasures at its roots.

Live Oaks at Beauvoir. Beauvoir is now a home for old soldiers, who enjoy their shade and see that the trees are well preserved.

Battle-Scarred Oak of Harrisburg. In its trunk a cannon ball was embedded during the historic Battle of Harrisburg near Tupelo, July 14, 1864. Confederate dead lie buried beneath its gnarled branches.

Two post oaks at Brices' Cross Road. In Lee County, 5 miles west of Baldwyn, are two post oaks famous because a Federal battery was stationed between them, on June 10, 1864, when the Union forces under General Sturgis were defeated by the Confederates under General Forrester.

Confederate Tree. An old red oak which stands on North Lamar Street in Oxford, is claimed to be one of the largest, oldest, and most historic trees in the South. Its history dates back to 1842. As a small tree it served as a starting point from the town of Oxford after the site had been purchased from the Indians. During the War between the States, it is said, two of General Forrester's spies hid in this tree and observed the Union Army march into the town. General Grant is said to have made his headquarters beneath its branches when the Union Army invaded the town.

MISSOURI

Daniel Boone's "Judgment Tree," an elm in the Femme Osage district, near which Daniel Boone held court while commandant of the district.

MONTANA

Twin Pines, Beaverhead National Forest, where Indian sharpshooters are said to have been located during a battle between Nezperce Indians, under Chief Joseph, and soldiers and citizens under General Gibbon, August 9, 1877 (fig. 17).

NEBRASKA

Lone Tree (cottonwood) on the north bank of the Platte River about 3 miles southwest of the site of Central City. Beneath its spreading shade, Indian chiefs are said to have held their councils. Lone Tree Ranch, established in the neighborhood in 1858, was named in honor of the old tree, and so were the post office and railroad station 3 miles distant. In 1865 the big cottonwood was felled by a violent storm. In 1911 a stone monument in the form of a cottonwood stump was erected on the spot.

NEW JERSEY

Stockton Catalpas, Princeton, a memorial to Richard Stockton, the well-known signer of the Declaration of Independence, who is believed to have brought the trees from England in 1762. They are also called "Independence Trees" because they are in flower over the Fourth of July.

F–203601

FIGURE 17.—TWIN PINES, BEAVERHEAD NATIONAL FOREST, MONT.

NEW YORK

Hessian Beeches, at Bay Ridge, beneath which, tradition has it, Hessians camped during the Revolution.

Treaty Chestnut Tree (now dead) of Phillipse Manor, near New York City, which stood in plain sight from the Albany Post Road. Under its branches, it is believed, was signed the last treaty between the whites and the Wequadequeek Indians, who lived in that locality. (See trees associated particularly with writers and literature, p. 49.)

Verplanck Kentucky Coffeetree (*Gymnocladus dioicus* (L.) Kock) directly in front of the historic Verplanck mansion at Fishkill-on-the-Hudson, occupied for some time during the Revolution by Baron von Steuben. This mansion was also the scene of the first meeting of the Society of the Cincinnati.

Caledonia Council Elm, standing on grounds of the Caledonia High School, once marked the meeting place of the Iroquois Indians on the main trail between Albany and Niagara Falls. Many prisoners of war were executed near this tree.

Council Elm Tree, in the Johnstown cemetery, Johnstown. Under this tree Governor Tryon, Sir William Johnson (Commissioner of Indian Affairs), Joseph Brant, and the Mohawk Indians of Lower Castle met in conference on July 28, 1772. Important conferences

between the Iroquois and Sir William Johnson were also held under this tree. These conferences led to the opening of the Ohio Territory.

Elm of Italy Hollow (*71, pp. 44–45; 85, pp. 9–12*). Old Indian council tree, near the border of the towns of Potter and Middlesex. Standing at the junction of several Indian trails, it furnished an accessible meeting place for the various tribes.

Fort Stanwix Elm Sapling, in the city of Rome, near which the Iroquois Indians and the United States made the treaty by which the Indians signed over a vast portion of their lands in the West to the United States in 1788. This tree is one of the claimants to having flown the first American flag—one was flown from it on August 6, 1776.

Markham Elm, on the Markham estate, 2 miles north of Avon. The Indians of western New York held this tree in great veneration and made a favorite camping ground of the spot. It also served as a resting place for early missionaries, scouts, and traders.

Pioneer Elm, Ballston Lake, near which stood the log cabin of Michael and Patrick McDonald, first white settlers in Saratoga County, 1763.

Another "birthplace" of the Republican Party (see Republican Party Oaks, p. 30) is the claim of an elm at the corner of South Avenue and West Onondaga Street, Syracuse. There, in the early sixties, in what was then the garden of Vivus W. Smith, editor and abolitionist, assembled a noteworthy gathering, consisting of Smith himself, Horace Greeley, Thurlow Weed, and William H. Seward, afterward Lincoln's Secretary of State. These men are said there to have drawn up and subscribed their names to a set of principles that governed the beginnings of the party.

Seneca Council Elm, near Kanandesaga (now Geneva). Besides sheltering the conclaves of the Seneca Indians, this old elm marked otherwise historic ground. Kanandesaga figured in the French and Indian Wars and the Revolution. During the Revolution the Seneca chief was Big Tree.

Council Maple, on the old Hutchinson estate, Cayuga Lake, Cayuga, under which Indians held their conferences.

Council Oak of Penn Yan, Yates County. Under this tree the Seneca braves built their council fires and smoked the pipe of peace while they deliberated on the affairs of the Six Nations.

Red Oak at Lloyds Neck, on the north shore of Long Island, facing Halesite, where Nathan Hale, hero of the American Revolution, was finally captured by the British on September 21, 1776, and hanged the next day. He it was who said that he truly regretted that he had but one life to give for his country.

Whipping tree at Peekskill. This tree, an oak, is still flourishing in a field adjoining the grounds of the Van Cortland Manor house, Washington's headquarters when he was in Peekskill. Here Lafayette, Rochambeau, Von Steuben, and other famous soldiers, were entertained. Beneath this tree strenuous correction was administered to deserters from the American cause in Revolutionary times, whence its name.

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FIGURE 18.—HENDRICK HUDSON'S TULIPTREE, NEW YORK, N. Y. (COURTESY AMERICAN FORESTRY ASSOCIATION.)

Witenagemot Oak, Schagticoke. This oak was planted to mark the signing of a treaty of peace with the Indians in 1676, by Sir Edmund Andros, colonial governor of the Province of New York and Indian commissioner.

War Scythe Tree, balm-of-Gilead (balsam poplar), near Waterloo. In October 1861 a farmer named Johnson hung his scythe in the crotch of this tree and went off with a New York regiment to the Civil War, telling his wife: "Don't touch the scythe until I come back." He never returned, and the tree has grown around the blade, the handle having been removed. Two others now keep the first scythe company. When the United States entered the World War, two sons of the present owner of the farm hung their scythes in the tree, one to enter the Army and the other the Navy.

Hendrick Hudson's Tuliptree, the Inwood tuliptree (*Liriodendron tulipifera* L.), Inwood Park, northern end of Manhattan Island, at the mouth of the Harlem River, New York City. Hudson entered this inlet in 1609 and may have met the Indians here. The tree is the only living thing on the island which was there during Hudson's time (fig. 18). The city's park department has preserved this ancient tree. On the surface of one of the cement fillings is the following inscription in gold letters:

Tuliptree, Liriodendron Tulipifera. Henry Hudson entered this inlet in 1609 and may have met the Indians here who used the place for a camp, as shown by the quantity of old broken oyster shells around this tree and nearby. (*17, v. 33, p. 545; 71, pp. 63–64*).

Torture Tree (species not given), 1 mile east of Cuylerville, in Livingston County. Lt. Thomas Boyd and Sgt. Michael Parker, of Sullivan's Expedition, 1779, were captured by the Iroquois Indians, most severely tortured, and eventually killed near this tree, September 11, 1779.

Lombardy Poplar (fig. 19), planted over 200 years ago at Fort Niagara by the French occupants. It is the sole survivor of a group of these trees planted at the time. This is the only United States Army post flying three flags—the French, British, and United States. When the colors are lowered, the French flag comes down first, followed by the British, then Old Glory.

NORTH CAROLINA

Cypress of New Bern, at New Bern. This was the council tree of patriot leaders.

Battleground Oak, also known as Cornwallis Oak and Liberty Oak, stands but a few hundred yards from where the Battle of Guilford Courthouse was fought in 1781. Tradition has it that during the battle General Greene tied his horse to this tree.

Revolutionary or New Garden Oak. (See Trees associated with religion, p. 53.)

Henry Clay Oak (white oak), Wake County. Henry Clay is said to have sat under this oak while writing his memorable letter opposing the annexation of Texas.

Tory Oak, Wilkesboro, Wilkes County, on which four Tories are said to have been hanged by the Revolutionists.

Eagle's Nest Longleaf Pine, Dare County, on the edge of Fort Raleigh, Roanoke Island. The tree bears the letter C, which, it is

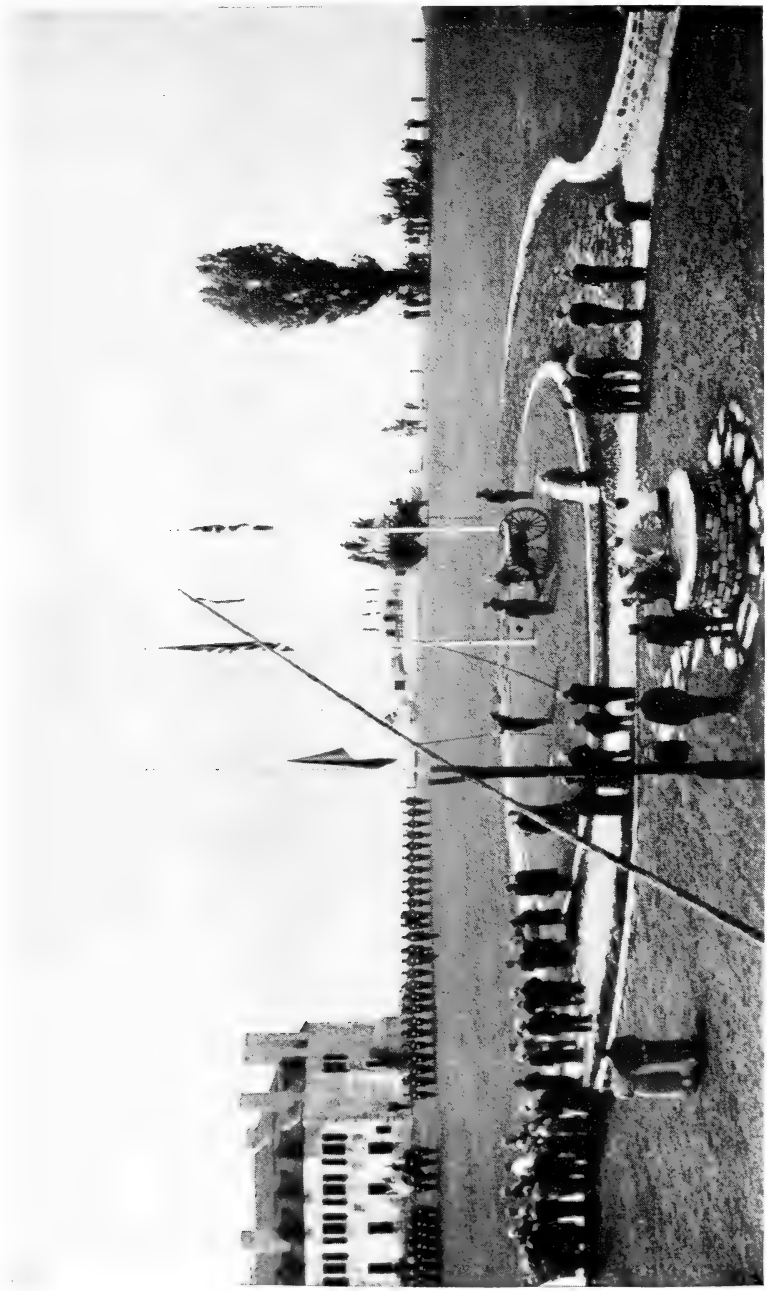

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FIGURE 19.—LOMBARDY POPLAR AT FORT NIAGARA, N. Y., SOLE SURVIVOR OF A GROUP PLANTED BY THE FRENCH MORE THAN 200 YEARS AGO. (COURTESY OF C. L. WALLACE, EAST ORANGE, N. J.)

believed, indicates that the colony established here by Sir Walter Raleigh had moved to the Croatans, friendly Indians.

OHIO

Logan Elm, 6 miles south of Circleville, in southern Ohio. It was under this tree that Lord Dunmore, colonial Governor of Virginia, made a treaty of peace with Chief Cornstalk of the Shawnees and Chief Logan of the Mingos 2 years before the Revolution. Chief Logan declined to be present, but sent a message which is considered a classic of Indian oratory.

Chief Logan's Message

I appeal to any white man to say if ever he entered Logan's cabin hungry and he gave him not meat; if ever he came cold and naked and he clothed him not. During the course of the last long and bloody war, Logan remained idle in his cabin, an advocate for peace. Such was my love for the whites that my countrymen pointed as they passed and said: "Logan is the friend of the white men." I had even thought to live with you, but for the injuries of one man, Colonel Cresap, who last spring in cold blood and unprovoked murdered all the relatives of Logan, not sparing even his women and children.[3] There runs not a drop of my blood in the veins of any living creature. This calls on me for revenge. I have sought it. I have killed many. I have fully glutted my vengeance. For my country, I rejoice at the beams of peace. Yet do not harbor the thought that mine is the joy of fear. Logan never felt fear. He will not turn on his heel to save his life. Who is there to mourn for Logan? Not one.

The elm is now owned and cared for by the State of Ohio. Named for Chief Logan, it is 70 feet high and nearly 22 feet in circumference 6 feet above the ground. It has a crown spread of 148 feet. In recent years it has been severely damaged by storms. Seeds from this tree have been planted by the State forestry department, and more than 100 seedlings have been transplanted in 88 counties in Ohio with appropriate ceremonies.

Centennial Oak (white oak), near Lake Punderson, Newberry, was planted on July 4, 1876, by the Woman's Suffrage Political Club.

Fort Ball Sycamore, at Tiffin. This tree was a sapling growing within the walls of Fort Ball during the War of 1812. In 1926 the Dolly Todd Madison Chapter, D. A. R., erected a tablet at the base of the tree marking it as historic.

OKLAHOMA

Tribal Council Tree, Tulsa, a giant oak near the Arkansas River. The bronze marker placed on it December 22, 1923, reads: "Tribal Council Tree—Meeting place of the Creek Indians after their coming to Indian Territory in 1828" (fig. 20). There is an interesting story, too long to give here, of the Trail of Tears of the Creek Indians and the carrying of the council fire (77).

OREGON

Pioneer Walnut, planted at Salem in pioneer days. (See Trees notable for unusual size or age, p. 92.)

On the Ochoco National forest is the famous "Sheep Shooters' Tree," under which the cattlemen met in the range wars of 1904–1905.

[3] It has been proved that Logan was mistaken about Colonel Cresap's guilt.

F-321106

FIGURE 20.—THE OLD CREEK TRIBAL COUNCIL TREE, TULSA, OKLA. (COURTESY OF AMERICAN FORESTRY ASSOCIATION.)

PENNSYLVANIA

Cumberland Elm, 1 mile southwest of Carlisle, is in the very center of the Cumberland Valley and was a landmark of the early settlers.

Liberty Tree, near Clinton, sometimes called the Tiadaghton Elm and sometimes the Pine Creek Elm. Under this tree the famous Tiadaghton Creek Declaration of Independence was being signed at the same time that the Declaration of Independence was signed in Independence Hall, Philadelphia.

Dilworthtown Oak, about a mile west of Dilworthtown, in Chester County, is on the Brandywine Battlefield, near Washington's Headquarters, where some of the fiercest fighting in the American Revolution took place.

Kutztown White Oak. It is reported that an ammunition train of the Continental Army camped under this tree about the time of the Battle of Germantown.

Fort Hunter Buttonwood (*Platanus occidentalis* L.), a huge tree of its kind standing by the edge of Fishing Creek in the Fort Hunter tract of land, is of great age and is among the historic trees of Pennsylvania (*68*). Fort Hunter, 6 miles north of the State capital, on the east side of the Susquehanna, was one of a chain of forts between the Susquehanna and the Delaware Rivers. Situated on a bluff jutting out into the stream "where the Blue Hills cross the Susquehanna," this fort commanded an extensive view up and down that river and overlooked as well the tortuous course and outlet of Fishing Creek. The banks of this stream, judging by the relics found there, were a favorite camping site of the marauding red men. Hunter's Fort served as a refuge for the pioneers in those unsettled times, and many a thrilling tale is told of alarm and of escape (fig. 21).

F—323017

FIGURE 21.—FORT HUNTER BUTTONWOOD BY THE EDGE OF FISHING CREEK, FORT HUNTER TRACT, 6 MILES NORTH OF HARRISBURG, PA. (COURTESY OF MRS. MARGARET WISTER MEIGS.)

SOUTH CAROLINA

Historic Red Oak, at Chesterfield. The first flag ever thrown to the breeze in the South on which was printed "Immediate separate State action" was girded to this tree.

Spy Oak, at Hillcrest, High Hills of the Santee, near Stateburg, is so called because two Tory spies were hanged therefrom by General Sumter's men during the Revolution (*73*).

SOUTH DAKOTA

Struck-by-the-Ree's Tree, at Yankton (named for the Sioux chief who bore this name). Here the Yanktown tribe of the Sioux Indians met with Lewis and Clark, and together they held "a grand council, powwow, and carousal." The name comes from a savage encounter between the Sioux and the Ree Indians. Struck-by-the-Ree was friendly to the whites, partly because he was proud of having been wrapped in the American flag by Captain Lewis, who, in doing so, prophesied that the boy would become a chief of the tribe.

TENNESSEE

Daniel Boone's "Bar Tree," a beech in Washington County, in the extreme northeastern portion of the State was a living record in the life of probably the first white man to venture into the heavy forests of the middle Appalachians (*67*). This tree bore the inscription: "D. Boon cilled A BAR On Tree in ThE YEar 1760" (fig. 22). This tree is no longer living.

Pemberton Oak, on the Cherokee National Forest, bears a tablet placed there by the Sycamore Shoals Chapter of the Daughters of the American Revolution, telling that Col. John Pemberton here mustered troops for the Battle of Kings Mountain. Kings Mountain is a ridge in Gaston County, N. C., and York County, S. C. About 1½ miles south of the boundary line between the two States, the Battle of Kings Mountain was fought on October 7, 1780, the Americans being victorious. This victory largely contributed to the success of General Greene's campaign against Lord Cornwallis.

TEXAS

Treaty Oak, in Austin, near the west bank of the Colorado River, a mammoth live oak estimated to be over 500 years old. The Comanche and Tejas Indians often met for feats of skill and endurance and for religious rites beneath this tree. They called it "The Father of the Forest," and regarded it with superstitious reverence. Tradition has it that Stephen F. Austin signed the first boundary line treaty between the settlers and the Indians under this tree, the line being so placed that the tree stood within the settlers' lands.

Masonic Charter Oak, near Brazoria, Tex., under whose sturdy branches Texas declared her independence. Here the second provisional government of Texas was organized on March 2, 1836.

VIRGINIA

Hessian apple trees, 3 miles north of Winchester. During the Revolution, Hessian soldiers planted an orchard here. Sixteen of these

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FIGURE 22.—DANIEL BOONE'S "BAR TREE," WASHINGTON COUNTY, TENN.

trees of the Fameuse variety have survived, and most of them are bearing regularly.

Cedars of Lebanon, Arlington Cemetery. (See Trees associated with educators or educational institutions, p. 46.)

Chippoke Oak, Chippoke plantation, Surry County, takes its name from the Indian chief, Chippoke, who was a friend of the early settlers.

White Oaks in Abbs Valley, Tazewell County, at the grave of James Moore, who was one of the first persons killed in the Indian massacre of 1786.

Sheep-shearing Oak, one of the most famous trees in Arlington National Cemetery. It was the scene of the shearing of a valuable flock of imported Merino sheep owned by George Washington Parke Custis. This oak is estimated to be 300 years old.

Tarleton's Oak, Charlottesville. Tradition has it that under this oak the British cavalryman, Banastre Tarleton, planned his raid on Charlottesville on June 4, 1781. He attempted to capture Governor Jefferson and the legislature, but Capt. Jack Jouett, by taking a short route, arrived in time to warn the patriots of their danger.

Tory Oaks, white oaks in the Black Lick Valley in western Wythe County. Gen. William Campbell's men surrounded a band of plundering Tories and hung them to these two nearby oaks.

Original Lynching Tree (walnut) on plantation near Alta Vista. According to the inscription on a marker near this giant black walnut, under it—

Colonel Charles Lynch, William Preston, Robert Adams, Jr., James Calloway, and others held an informal court for the trial of Tories and criminals, 1780. From this rude justice, the term "lynch law" was evolved.

The Virginia Conservation and Development Commission erected the marker in 1929.

WASHINGTON

A western red cedar bearing the inscription, "Washington Territorial Volunteers camped here June 2, 1856," was recently discovered in the upper Cedar River watershed, Snoqualmie National Forest. It is recorded that in 1856 Regular Army troops were camped at Snoqualmie Falls in order to watch Snoqualmie Pass for Indian raiding parties from east of the mountains. Without question, the Territorial Volunteers were watching Yakima Pass for the same reason at the time the inscription was made.

WEST VIRGINIA

Corner Oaks, at the foot of Marlin's Mountain at Marlinton (*10, pp. 412–417*), marked: "These oaks are said to be the oldest corner trees in the Mississippi Valley." They also bear the name and date: "General Andrew Lewis, 1751."

Blennerhasset Sycamore, on what is known as Blennerhasset Island in the Ohio River about 2 miles below Parkersburg, with a large hole in the trunk, in which Blennerhasset took refuge when pursued for his connection with the Burr conspiracy to separate the Western States from the rest of the United States (1807).

Old Pringle Sycamore, which stands at the mouth of Turkey Run on the Buckhannon River, a few miles below the little town of Buckhannon in what is now Upshur County, is the "grandchild" of a tree which served as a home for the first white settlers in the trans-Allegheny region in what is now West Virginia. As early as 1764 Samuel and John Pringle, two brothers, penetrated the unbroken wilderness and lived for 3 years in the hollow of the great old tree. The cavity measured 12 feet across, so they were not crowded. The stump stood until 1850, and the second Pringle tree, which sprang from the roots of the first, was carried away by a flood in 1880. The present tree is a sprout from the roots of the second, and in its cavity three persons could easily find shelter (*17, p. 416*).

WISCONSIN

Fort Howard Elm occupies the site of the first permanent fortification in Wisconsin and for 200 years has been associated with the history of the region owned in turn by France, Great Britain, and the United States.

TREES ASSOCIATED DIRECTLY WITH EDUCATORS OR EDUCATIONAL INSTITUTIONS

ALABAMA

Gorgas Oak, campus of the University of Alabama, Tuscaloosa. This is a pin oak named for Gen. William Crawford Gorgas, American Army surgeon, born at Mobile, Ala., under whose sanitary measures yellow fever has been eradicated from tropical America.

CALIFORNIA

Hilgard Chestnut, College of Agriculture, University of California, Berkeley. Named for E. W. Hilgard, first dean of the college and one of the pioneers of agricultural education in the United States. The Hilgard Chestnut is of a European species (*Castanea sativa*).

Henry S. Graves Redwood Grove, named in honor of Henry Solon Graves, forester, educator, and administrator. He succeeded Gifford Pinchot as chief forester of the United States Department of Agriculture. This grove is 10 miles south of Crescent City.

CONNECTICUT

Calhoun Elm, Litchfield. (See Trees intimately associated with other famous people, p. 11.)

DISTRICT OF COLUMBIA

Lombardy Poplar, on Massachusetts Avenue near Eighteenth Street, NW., memorial to Quentin Roosevelt, youngest son of Theodore Roosevelt, killed during the World War. This tree was planted in his memory by the students of the Force School on Massachusetts Avenue between Seventeenth and Eighteenth Streets, NW., which he attended.

KANSAS

Cypress, "The Tree That Would Not Die," planted by Father Boniface, Kansas pioneer, monk, professor, and naturalist, on the slope of a ravine on the campus of St. Benedict's College, at Atchison.

During campus-improvement work, this dauntless tree has lived through the filling-in of the ravine, although its trunk is buried for 30 feet or more.

Locust in Topeka, associated with the Civil War history of the State, is marked by a concrete block which is inscribed: "The oldest tree in Topeka. The 2–B Grade of 1912. Central Park School."

LOUISIANA

Century Live Oaks, on the campus of Southwestern Louisiana Institute, Lafayette, planted on the first day of the twentieth century, January 1, 1901.

McDonough Oak, City Park of New Orleans, bears name of great patron of education who left his fortune to Baltimore, Md., and New Orleans, La., for educational purposes.

MAINE

Thorndike Oak, red oak in center of Bowdoin College Campus, Brunswick. It bears the name of one of the first eight students to enter Bowdoin in 1802, who planted the acorn.

MICHIGAN

Filibert Roth Memory Elm, planted by his friends in Palmer Park, Detroit, in May 1926. Dr. Roth was an outstanding figure in educational work in forestry. He was dean of the forestry department, University of Michigan, Ann Arbor, for more than 20 years.

Marshall Oak. A huge forest tree on the ground of H. C. Brook, of Marshall. Under this historic tree two early settlers often met in the summer of 1834 to discuss their plans for an improved public-school system. These men were Isaac E. Crary, United States Representative in Congress from 1835 to 1840, and John D. Pierce, first superintendent of public instruction in Michigan, from 1836 to 1841. Their system, enacted into law in 1836, has given rise to the claim that the school system of the United States had its inception in the village of Marshall, which has been called "The cradle of American public school education" (fig. 23 *A* and *B*.)

NEW HAMPSHIRE

Old Pine, at Dartmouth College, Hanover, was the center of class-day exercises and other celebrations during the greater part of the nineteenth century. It was cut down in 1895, but its stump, 4 feet in height, has been preserved as a valued relic.

NEW JERSEY

The Stamp-Act Sycamores, planted in front of the residence of the president of Princeton University in 1765, have always been associated with the famous Stamp Act of that year.

NEW YORK

Nott Elm, on grounds of historic Union College, at Schenectady, named in honor of Eliphalet Nott, president of Union College from

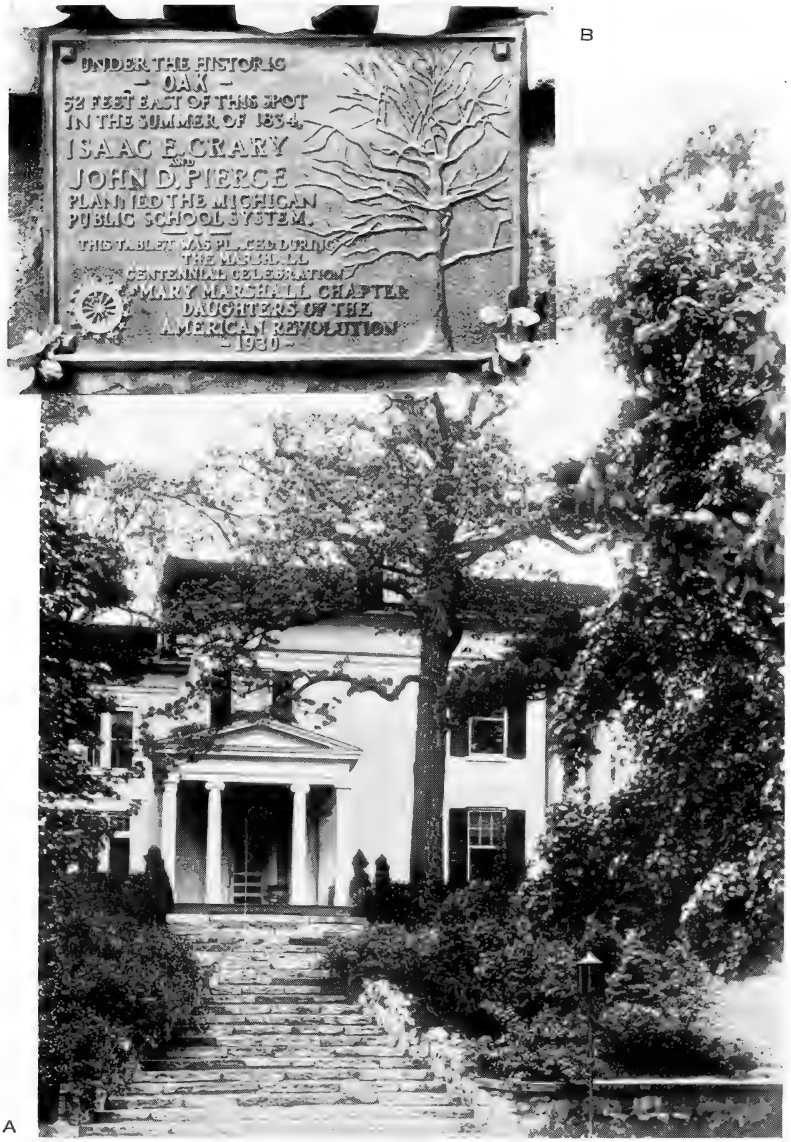

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FIGURE 23.—A, THE MARSHALL OAK, MICHIGAN; B, THE MARSHALL OAK TABLET. (COURTESY OF HAROLD C. BROOKS, MARSHALL, MICH.)

1804 to 1866. Many illustrious citizens of the United States have sat beneath this tree in informal meetings of the senior classes—Senators, Cabinet officers, Governors, even President Chester A. Arthur, and scientists like the agriculturist, Seaman A. Knapp, and Franklin B. Hough, "father of American forestry."

NORTH CAROLINA

New Garden Oak (Quaker settlement of New Garden) on the campus of Guilford College, near Greensboro the first coeducational college of the South. (See also Trees associated with religion, p. 53.)

Davie Poplar (tuliptree), Orange County, on the campus of the University of North Carolina at Chapel Hill. Under this tree the commissioners tied their horses when selecting a site for the university.

OHIO

McGuffy Elms, on the campus of Ohio University, at Athens, planted by William McGuffy, president of the institution and author of McGuffy Readers. Fifteen of the forty-eight trees planted were still standing in 1934 and were about 90 years old.

Oberlin Elm, on a corner of the Oberlin College campus, Oberlin. In its shade the first building of Oberlin College was erected. This was the first American college to admit women on an equality with men.

PENNSYLVANIA

Historic White Oak at King of Prussia, dedicated to Henry Sturgis Drinker for his services in forestry by the Pennsylvania Forestry Association (*75*), August 19, 1933, is said to have been standing when the founder of the Commonwealth, William Penn, was born (1644). Lehigh University took part in dedication.

VIRGINIA

Cedars of Lebanon, from the historic Lebanon Mountains in Syria, planted in Arlington Cemetery, a gift to the United States from the American University of Beirut, Syria, in appreciation of aid extended by this country through the Near East Relief.

Emancipation Oak, on the grounds of Hampton Institute in Elizabeth City County. The first school for "contrabands" was held under it in pleasant weather.

Abingdon Smoketree, near the main portico of Martha Washington College, Abingdon. Tradition has it that William Campbell Preston brought this tree with him from Napoleon's grave.

V. M. I. Guard Tree (hickory), Lexington. Reported to have been the only tree standing on the grounds of Virginia Military Institute when it was founded in 1839. Guard tents were pitched under this tree in summer.

William and Mary Live Oak, southeast corner of the campus of William and Mary College, Williamsburg. Styled, "Old Monarch of Middle Plantation."

TREES ASSOCIATED PARTICULARLY WITH WRITERS AND LITERATURE

CALIFORNIA

Jack London's Oak. A sturdy oak tree planted on the plaza before the city hall, in his native city, Oakland. The dedicatory resolution of the city council of Oakland reads:

> We confer this mite of honor by dedicating Oakland's standard-bearing oak to him who grew with this city, that this sturdy sentinel may stand in memory and to honor Jack London.

Mark Twain Oak, on Jackass Hill, Tuolumne County, under which the humorist wrote The Jumping Frog of Calaveras County, which made him famous overnight. This tree was felled in 1929, and only the stump remains. Sections of the tree are on exhibit in the Museum of Natural History, New York City, and in the British Museum, London.

DISTRICT OF COLUMBIA

Six memorial oaks, all red oaks on the new Academy of Science grounds Twenty-first and C Streets NW, keep alive the memory of Ralph Waldo Emerson, John Burroughs, John James Audubon, Henry David Thoreau, John Muir, Walt Whitman.

Shakespeare plot in West Potomac Park, Washington. On April 23, 1935, the anniversary of the birth of the Bard of Avon, trees presented by the Governors of various States were planted in a corner of the rose garden in West Potomac Park, as the nucleus of a Shakespeare garden. Wives of Senators and Representatives of the States contributing officiated in the tree planting. The trees planted include a tuliptree contributed by Tennessee, an ash by Massachusetts, mountain-ashes by New Hampshire and New York, pines by Michigan and Virginia, elms by Nebraska, Maine, and Arizona, oaks by South Carolina and Illinois, a cypress by Maryland, cherry trees by Kansas and California, persimmon trees by Florida and Delaware, a Russian olive tree by South Dakota, and a magnolia by Louisiana.

Southworth Oak (red oak), in the park at Thirty-sixth Street and Prospect Avenue NW, planted by the League of American Pen Women in memory of Mrs. E. D. E. N. Southworth, authoress, who resided for many years in old Georgetown.

FLORIDA

Mandarin Live Oak, Duval County, on St. Johns River. The piazza of the home of Harriet Beecher Stowe was built around this tree. During the Civil War a cannonball was shot into the tree from a Federal gunboat in the river. The bark has grown around the ball and has almost entirely covered it.

GEORGIA

Lanier Oak, on the edge of the Marshes of Glynn, at Brunswick. Under the gracious boughs of this tree, Sidney Lanier, native of Macon, Ga., and the greatest lyricist of the South, was inspired to write the Marshes of Glynn (fig. 24).

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FIGURE 24.—THE LANIER OAK, AT BRUNSWICK, GA. (COURTESY OF AMERICAN AUTOMOBILE ASSOCIATION.)

LOUISIANA

Evangeline Oak, at St. Martinville, on Bayou Teche, a giant live oak which marks the spot where the Acadians, driven from Nova Scotia, landed in St. Martinville in 1758, 2 years after their expulsion from their former homes. It has been immortalized by Longfellow in his poem, Evangeline.

Maryland Live Oak, at New Roads, under which James Ryder Randall wrote the words of Maryland, My Maryland.

MASSACHUSETTS

Oliver Wendell Holmes Pine, on old road to Lenox, in a wide sweep of lawn, a lone and superb pine much loved by Holmes.

Two notable white oaks in front of the Wayside Inn, on the State Road, in Sudbury, about 20 miles west of Boston, immortalized by Longfellow in his Tales of a Wayside Inn.

Louisa May Alcott Elms, in front of the Alcott home and the little grove of pines and spruces just beyond it. Under the shade of the elms once lived the author of Little Women, and among the whispering pines Hawthorne walked, thought, and wrote, or conversed with his friend, Thoreau.

Pratt Elm, or "The Great Elm of Concord," believed to have been set out in 1700. Beloved of Emerson, Hawthorne, and Thoreau.

Waverly Oaks, along Beaver Branch, near Waverly Station, 6 or 7 miles from Boston, are remarkably large trees and are famous, not

only for size but also for association with James Russell Lowell and the writing of his Vision of Sir Launfal (*83*). (See also Trees notable for unusual size or age, p. 85.)

Sheffield Elm, which, tradition says, was standing when the town of Sheffield was settled, in 1725. Oliver Wendell Holmes included the elm at Sheffield among those of greatest size, beauty, and symmetry of form.

The beautiful Whittier Elm, near the poet's birthplace at Haverhill. (See also Trees that have had special protection, pp. 56, 58.)

MICHIGAN

A red oak towers above the old Walker Tavern on the main highway between Detroit and Chicago, where the road from Toledo, Ohio, crosses the Chicago Pike. It spreads its shade over the roof that sheltered James Fenimore Cooper and other notables of the early days. Here Cooper is said to have written Oak Openings. The treetop has been thinned out. Local old-timers tell of the night that this was done, so that a flag might fly from a high place at the rally for "Tippecanoe and Tyler too."

NEW HAMPSHIRE

Whittier's Pine Tree, on the Sturtevant farm, near Sunset Hill, Center Harbor. Whittier bestowed upon it the name "Wood Giant" (1886), but it is now called "Whittier's Pine Tree."

NEW JERSEY

Haddon Yews, site of the old Haddon Homestead at Haddonfield, immortalized in Longfellow's beautiful poem, Elizabeth.

NEW YORK

Oak from Stratford-on-Avon, England. A little oak from Stratford-on-Avon, birthplace of William Shakespeare, was sent to Walter Hines Page when he was America's Ambassador to the Court of St. James, by the mayor of historic Startford. The precious package was immediately shipped to the Shakespeare garden committee of Central Park, New York, which had it planted in the corner known as the Garden of the Heart.

Shakespeare Memorial Oak, occupying a place of honor on the campus of the University of Rochester. This oak was brought from Shakespeare's home in Stratford-on-Avon, England, and was planted in Rochester, April 23, 1864, in connection with the tercentennial of Shakespeare's birth.

Treaty Tree of Phillipse Manor near New York City. Under this old chestnut, it is said, Washington Irving wrote The Headless Horseman. (See Trees associated with the building of the Nation, p. 32.)

NORTH CAROLINA

Joyce Kilmer Memorial Forest, a 4,000-acre tract of virgin forest near Lake Santeetlah in the Nantahala National Forest, southwestern North Carolina, was dedicated on July 30, 1936, to the poet who

wrote Trees. This area contains some of the most magnificent virgin timber to be found in the United States. Trees 5 and 6 feet in diameter are of common occurrence, and the largest tree measures 80 inches across the bole.

This memorial forest was established by authority of the Secretary of Agriculture and is under the administration of the regional forester of the Forest Service. The tract will be maintained as a permanent wildlife refuge. Deer, black bear, and other wild animals, including Russian wild hogs, are to be found here. Headquarters of the Nantahala Forest are at Franklin, N. C. The Joyce Kilmer memorial was sponsored by the Bozeman Bulger Post, Veterans of Foreign Wars, New York City. Joyce Kilmer was killed in action in France, July 30, 1918.

PENNSYLVANIA

Cedarcroft Chestnut, in grounds of home of Bayard Taylor, at Kennett Square, Chester County, is a splendid old chestnut whose shade was a favorite rendevzous of the well-known author. Sidney Lanier, the poet, a welcome visitor at Taylor's home, was much attached to this old tree and immortalized it in his graceful poem, Under the Cedarcroft Chestnut.

VIRGINIA

Margaret Preston Oak, in the family burying ground in Lexington Cemetery, Lexington, last resting place of the "poetess laureate of the South," Margaret Junkin Preston.

Lonesome Pine, Wise County, made famous by the late John Fox, Jr., in his novel, The Trail of the Lonesome Pine. A very large part of Wise County, in southwest Virginia, is in the Jefferson National Forest.

TREES ASSOCIATED WITH RELIGION

CALIFORNIA

Cathedral Oak rides the cliff of South Pasadena's rustic Arroyo Seco Park, and is believed to be at least 600 years old, according to the writings of the valiant Padre Juan Crespi, who was Padre Junipero Serra's right-hand man on his long journey from Mexico to found the missions of Alta, Calif, and who, when the sadly crippled Serra was unable to push onward by land toward Monterey in 1769, accompanied Caspar de Portola and his party of 66 soldiers, priests, muleteers, and Indians on the first overland trip northward through California. Franciscan padres always walked. Easter morning, 1770, found them in camp under the Cathedral Oak, and there they held the first Easter service on California soil. After Mission San Fernando had been established in 1791, the padres, on their journeys by foot from mission to mission, made the Cathedral Oak their overnight shelter, between San Gabriel and San Fernando. At one time a bell hung there to toll the hour of morning mass.

A Mile of Christmas Trees, Deodar cedars, Pasadena.

"The Oldest Christmas Tree," (*41*) General Grant Bigtree, the General Grant National Park (see Trees notable for unusual size or age, pp. 70–71.)

CONNECTICUT

Beecher Elm, Litchfield. This elm stands near the site of the Lyman Beecher House. Lyman Beecher was the Congregational minister in Litchfield from 1810 to 1824 and was the father of Harriet Beecher Stowe and seven Congregational ministers.

Oldest Inhabitant (an oak), Fairfield. (See Trees associated with the building of the Nation, p. 20.)

The Great Elm, Wethersfield. (See Trees notable for unusual size or age, p. 73.)

The 1812 White Oak, East Glastonbury. (See Trees associated with the building of the Nation, p. 20.)

Great White Oak, Hebron. In 1829 a bell for the new edifice of First Congregational Church was sent to Middle Haddam Landing from Boston. Hebron men with yokes of oxen brought the bell from the landing, and, unable to restrain their eagerness to hear the bell, they hung it over a branch of this oak. The church burned in 1882 and the bell with it, but the tree is still in vigorous condition showing no signs of decay.

Glebe House Sycamore, Woodbury. This very large old sycamore is identified with the Glebe House, in which Samuel Seabury was selected as the first bishop of the Protestant Episcopal Church in America in 1783.

DISTRICT OF COLUMBIA

Twin copper beeches, on front lawn of Georgetown Convent. These magnificent specimens of one of our most beautiful trees must have been in their prime during Civil War days.

Magnolia grandiflora planted by Mrs. Woodrow Wilson, second wife of President Wilson, near the famous wall of the Bishop's Garden, National Cathedral Close, Washington. Mrs. Wilson used a shovel which had been handled on similar occasions at the cathedral by the Archbishop of Canterbury, the Prince of Wales, the Archbishop of York, the Dean of Chester, and other distinguished visitors.

Glebe Oak, beside the chapel in Rock Creek Cemetery, is a white oak only 14 feet in circumference but with limbs so tremendous that three of them hang from the height of 10 feet to the roadside. The original glebe was a gift of "1,000 pounds of tobacco and 100 acres of land for the then minister and his successors, and with that intent forever." The gift was made in 1719 by "John Bradford, Gentleman," of Prince Georges County, Md. A chapel was built beside the tree and, in 1726, became the parish church of Prince Georges parish, replaced later by the present edifice. The tree's roots have been cut back to accommodate burials under the tree until the life of the tree is now endangered (fig 25.)

GEORGIA

Wesley Live Oak, St. Simon Island, off the coast of Georgia, under which preached both John and Charles Wesley, pioneers of Methodism in this country. It stands at the gate of the churchyard of Christ Church, on whose parish register are the names of some of the earliest settlers on the island.

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FIGURE 25.—THE GLEBE OAK, ROCK CREEK CEMETERY, WASHINGTON, D. C.

INDIANA

Huntington Elm. (See Trees that have had special protection, p. 56.)

IOWA

Denmark Elms (American elms), in the village of Denmark, near the Congregational Church. While Deacon Trowbridge was in the act of planting them in 1865, a courier galloped up with the news of the assasination of Abraham Lincoln.

KANSAS

Lincoln Memorial Elm (American elm), at Atchison, in the churchyard of a small Methodist church. Here Lincoln spoke preceding his nomination for President of the United States. The crowd to hear him overflowed the building, and an audience larger than that inside gathered around the young elm outside the open window near which Lincoln stood. The tree has been carefully preserved and bears a bronze tablet, the gift of the Daughters of the American Revolution.

KENTUCKY

Famous elm at Boonesborough. (See Trees associated with the building of the Nation, p. 27.)

NEW JERSEY

Historic white oak in Friends' Cemetery, at Salem. The tree is supposed to have been in its prime when Salem was founded in 1675

and the land on which it stands came into the possession of the Society of Friends in 1681. Its picture has been adopted for use on the New Jersey State forestry crest or emblem. It is a matter of authentic record that when John Fenwicke, who had bought one-half of New Jersey for $5,000 in trust for Edward Byllings and others, landed on the Delaware in 1675, he made a treaty with the Indians in the shade of this oak, a treaty never broken, because no white man has ever been killed by an Indian in Salem County nor any Indian by a white man. (See Trees notable for unusual size or age, p. 87.)

Washington-Ball Walnut Tree. (See Trees associated with notable people, p. 4.)

NEW YORK

Presbyterian Oak, at Smithfield, about 6 miles east of Amenia, on the road from Amenia to Poughkeepsie by way of Millbrook. George Whitfield preached under this oak on Sunday, June 18, 1770. The services were to have been held in the church, opposite which the tree stands, but in order to accommodate the congregation he delivered his sermon in the inviting shade of the oak. On the 150th anniversay of this occasion, a plate was attached to the tree commemorating its history.

NORTH CAROLINA

New Garden Oak (called also "The Revolutionary Oak"), near the Quaker Meetinghouse of New Garden. After the battle of Guilford Courthouse, near what is now Greensboro, both General Greene and Lord Cornwallis withdrew, leaving their wounded to the care of the Quakers of New Garden, 4½ miles southwest of the battleground. The Quakers, then as now, peace-loving people, hastened to care for the wounded of both armies, and as the mortally wounded died, they were buried in the shade of a magnificent white oak.

The South's "Living Christmas Tree," in Hilton Park, Wilmington. (See also Trees notable for unusual size or age; p. 89.)

PENNSYLVANIA

Witness Tree, white oak still standing before the Donegal Presbyterian Church, in Lancaster County (*46*) under whose spreading branches the congregation swore allegiance to the Republic in June 1777 (fig. 26).

Huguenot Oak, Oley Valley, Berks County. This white oak stands in the middle of a public road and bounds the corners of four farms. It is on the site of an earlier white oak under whose spreading branches the first Huguenot settlers in Oley Valley held services on their arrival from Rotterdam, in 1719.

New London Oak, one of the largest white oaks in Pennsylvania, stands by the New London Presbyterian Church, in Chester County. The tree is centuries old, according to history, and was standing there when this church was organized in 1726. Two Governors have interested themselves in the fate of this tree when road work threatened its existence.

Brandywine White Oaks, a trio of white oaks standing before the Brandywine Baptist Church near Chadd's Ford, Delaware County.

FIGURE 26.—WITNESS TREE, LANCASTER COUNTY, PA.

Sassafras at Horsham, in a quaint old graveyard directly opposite the Friends' meeting house. This noble tree is estimated to be much more than 300 years old. It stands as a monument to pioneer settlers of Pennsylvania who were buried here as early as 1719 (*95*).

RHODE ISLAND

Catholic Oak, at Lonsdale, near the corner of Broad and Mill Streets. In 1843 James Cook Richmond, a missionary of the Episcopal Church, on his way to preach at a neighboring town, paused beneath the branches of this immense oak, exclaiming: "What a beautiful tree this is! I think I will hold services here next Sunday." He did, and the services soon became popular. The first was held on Whitsunday, June 4, 1843, when Mr. Richmond christened the tree "The Catholic Oak", referring to its universal invitation to worship. After preaching beneath the oak for several months, Mr. Richmond was sent to another field, but he returned every year to hold service under the tree on Whitsunday. An iron railing has been placed around this oak, with a tablet commemorating its history.

VIRGINIA

Washington Tuliptree, at Falls Church, in the churchyard of the church erected in 1734. This is the tree to which Washington tied his horse when he attended a meeting of the vestrymen. The church was used as a stable for the horses of Union soldiers during the Civil War.

TREES THAT HAVE HAD SPECIAL PROTECTION

CONNECTICUT

Johnson Oak, halfway between Stratford and Bridgeport, said to be 500 years old. The property on which it stands has changed hands many times, and when the city of Bridgeport opened up the land, a citizen bought the lot on which the tree stands and built a retaining wall about the tree to help save it (*11*, *v. 27*).

Johnson Oak, Northford. The property on which this oak stands was purchased by Nathaniel Johnson in 1714. It remained in the Johnson family until 1916. This tree was saved from destruction in 1931 when the course of the State road was changed at the request of the town (*66*, *p. 21*). (Compare both Johnson Oaks mentioned. The stories are similar but from different sources, and distinctions may be noted which make it appear that they are different trees.)

Nichols' Spruces, Lyons Plains, Redding. These six trees can never legally be destroyed by men, according to the provisions of the deeds which have been given to each owner of the property since the first owner, Ebenezer Nichols, planted the trees in 1844.

DISTRICT OF COLUMBIA

Cameron Elm, near the House wing of the United States Capitol. (See Trees associated with notable people, p. 11.)

Three oak trees of Civil War fame stand near Thirtieth Street and Grant Road, Washington, D. C. Civil War generals held conference under these trees.

GEORGIA

The Oak That Owns Itself (white oak), near Athens. This oak is unique in that there was willed to it by its owner, William H. Jackson, "for and in consideration of the great love I bear this tree and the great desire I have for its protection * * * entire possession of itself and all land within 8 feet of the tree on all sides." This deed, dated 1820, is recorded in the town clerk's office (fig. 27).

Big Oak (a live oak), Thomasville, cared for as a historic treasure, stands near the intersection of two paved streets. At the time the contract for paving was let, the city outlined specifications covering its care. Also an application of 200 pounds of fertilizer is made each year to its roots, and the tree receives water as needed during hot, dry weather (*39*). (See also Trees notable for unusual size or age, p. 77.)

INDIANA

Famous Elm at Huntington, saved by a change in the architect's plans for the building of the Christian Science Church of Huntington. The architect redrew his plans to give the tree plenty of root and branch space, leaving out the organist's room and a Sunday school classroom.

Constitutional Elm, Corydon. (See Trees associated with the building of the Nation, p. 26.)

KANSAS

Delaware and Wyandotte Maple, at Olathe, under which the Delaware and Wyandotte Indians made a treaty of peace. In 1905 the city council and street department decided that this tree would have to come down, since it stood in the way of a proposed sidewalk. Mrs. Jennie Baker and her daughter, on whose property the tree stood, marched around and around it to prevent the crew ready with axes from doing their work of destruction. Three-fourths of the population of Olathe came to their assistance and protected the tree until legal aid was obtained for its permanent protection.

KENTUCKY

A sycamore with special protection, Pippapass, Knott County. Thirty-six square feet of land, sufficient to protect it from interference so long as it shall live, was deeded to the sycamore by deed of conveyance filed in Knott County, on August 20, 1918, "for and in consideration of its shade, coolness, and inspiration." It shades a home known as the House of the Sycamore Tree, in the Caney Creek Community Center, and has been christened the Freed-Budd Tree, probably in compliment to two of its well-wishers.

MASSACHUSETTS

The beautiful Whittier Elm, near the poet's birthplace at Haverhill. When the place was sold in order that the poet's mother might live near the Quaker Church in Amesbury, the new owner proposed to cut down the tree. An admirer of the poet then offered to pay a

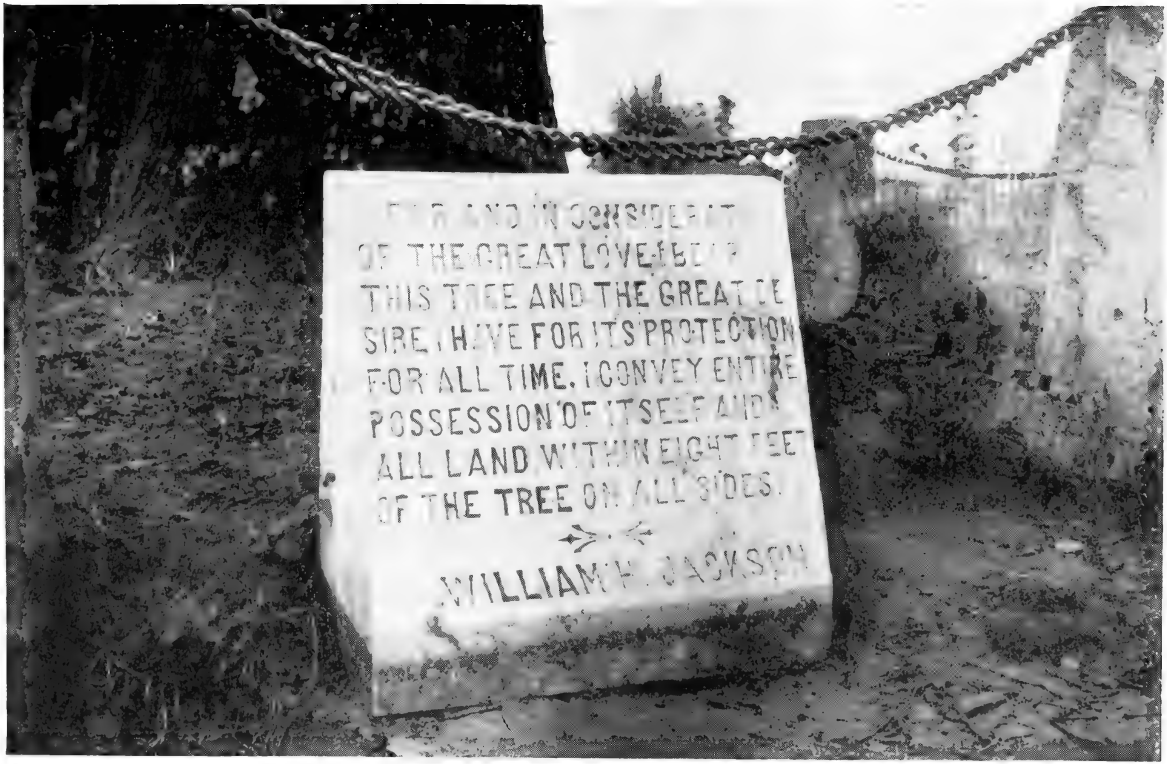

FIGURE 27.—THE OAK THAT OWNS ITSELF, NEAR ATHENS, GA.

yearly rental for the place including the tree in order to save the elm. The place is now owned by the Whittier Association, and the preservation of the beautiful old tree is assured.

Avery Oak, at Dedham, the oldest white oak in Dedham, bears the distinction of having been selected as suitable material for the celebrated and much-honored frigate *Old Ironsides*. The amount offered was $70, but the offer was refused because the owner's wife, Mrs. William Avery, greatly admired the tree and prevailed upon her husband to spare it (*105, p. 77*).

Gulliver Elm, at Milton, so called because it was deeded in 1833 by the First Congregational Parish in Milton to Isaac Gulliver who gave bond for its perpetual exemption from molestation.

OHIO

Logan Elm. (See Trees associated with the building of the Nation, p. 37.)

OKLAHOMA

McAlester's Lone Pine, McAlester. This tree stands in the middle of a wide street, with ample roadway on each side and is protected by a concrete curbing and a wire fence stretched on iron posts. It was there among its own kind long before the foot of white man tramped over the McAlester ranch.

PENNSYLVANIA

Greason White Oak, standing back of the railroad station at Greason on the Cumberland Valley Branch of the Pennsylvania Railroad, about 5 miles southwest of Carlisle. The farm on which the oak stands was long owned by Robert Greason, for whom Greason station is named. He would not agree to sell the tract to the railroad until the president of the road assured him that this splendid white oak would be given the best of care.

New London Oak, near the Presbyterian Church in Chester County. (See Trees associated with religion, p. 53.)

Sacred Oak of the Delaware Indians of Oley Valley, Berks County (*20, v. 38*). This chestnut oak was saved generations ago, at the request of an Indian chief, and flourishes today on the Hoch farm, in Oley Township, a few miles northeast of Reading (fig. 28). (See also Trees notable for unusual size or age, p. 92.)

SOUTH CAROLINA

Washington Live Oak, at Charleston. (See Trees associated with notable people, p. 4.)

TEXAS

Ancient pecan a few blocks from the city hall of San Antonio, on South Flores Street, from which Texans and Mexicans gathered pecans in season during the troublous times of 1836–37. Some years ago the owner of the property on which the tree stands decided to erect a large vehicle warehouse and salesroom. Not wishing to destroy so venerable a relic, he had the structure built around its

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FIGURE 28.—SACRED OAK OF THE DELAWARE INDIANS OF OLEY VALLEY, PA.

powerful trunk. The splendid old tree towers 20 feet above the roof of the second story.

VIRGINIA

Maury Walnut, Fredericksburg, so named because it proudly spreads its protecting branches over the home of the Pathfinder of the Seas, Matthew Fontaine Maury. When the Government appealed to patriotic Americans for black walnut for special purposes during the World War, this walnut tree was generously offered by the owner, Mrs. Coghill, without thought of recompense. However, when the inspector came to see it, he was so struck with its magnificence that he recommended that it be held in reserve for the last call.

Memorial Oak, on Westover Avenue, Norfolk. So far as known, this tree antedates the city itself, which was established by law in 1705 and incorporated as a city in 1736. In June 1923 this tree was purchased jointly by the city and the Garden Club of Norfolk as a memorial to the sons of Norfolk who made the supreme sacrifice in the World War.

TREES WITH PECULIAR AESTHETIC OR SENTIMENTAL ASSOCIATIONS

CALIFORNIA

A mile of Christmas trees, Deodar cedars, Pasadena.
Conservation Oak of the C. C. C., Santa Barbara National Forest.

Bohemian Grove, sequoias, beside the Russian River, in Sonoma County.

CONNECTICUT

Bridal Elm, Wethersfield. In colonial days it was the custom for a bride-to-be to bring a tree from her father's home and plant it near her new home. Sarah Saltonstall came from New London to marry Daniel Buck just before the Connecticut River froze over and so was not able to bring a tree with her. The next spring as she was drawing water from her well she saw an old Indian approaching and bearing a sapling in his hand. After some conversation in sign language Sarah exchanged a quart of rum for the sapling, which she planted by the well. This proud elm still stands today, shading the house where Sarah and Daniel Buck lived in 1775.

DISTRICT OF COLUMBIA

Japanese cherry trees (Yoshino Cherry, Prunus yedoensis Mats.) Tidal Basin and the Speedway in Potomac Park, presented by the Tokio Muncipal Council to Mrs. William Howard Taft, wife of the President, in 1909 and 1912, as a token of friendly feeling between Japan and the United States.

International Willow Oak, planted on Pan American grounds by women representing 20 countries.

Van Ness Sycamores, near the Pan American Building, on the site of the old Van Ness mansion.

Row of American elms planted along Bladensburg Road by the Federation of Women's Clubs in honor of women who have won great distinction.

Armistice Elms, two American elms planted at the head of International Avenue, leading to Lincoln Memorial, by the American Forestry Association in memory of the signing of the Armistice.

Five hundred Norway maples, planted along Sixteenth Street, as memorials to residents of Washington who gave their lives in the World War.

Mothers of America Tree, European white birch, to memorialize mothers of the Nation. The tree was planted east of the United States Capitol by the American Forestry Association. It was chosen because of its beauty and dignity (fig. 29).

Mothers of the Presidents Tree, weeping birch (*Betula pendula gracilis*), planted in honor of mothers of the Presidents on the south lawn of the White House.

ILLINOIS

Rock Island Honor Row Lombardy Poplars, planted by Rock Island lines along the right-of-way at Midlothian, for employees 50 years or more in the service of the railroad.

MISSOURI

Majestic oaks flanking the stages of the Municipal Opera Association outdoor theater and the New Garden Theater, St. Louis.

F—321128

FIGURE 29.—MOTHERS OF AMERICA TREE, EUROPEAN WHITE BIRCH, UNITED STATES CAPITOL GROUNDS, WASHINGTON, D. C.

PENNSYLVANIA

The first "Mothers' Tree," Reading, a European white birch, planted on the shore of Antietam Lake, in 1923, under the auspices of the American Forestry Association.

Inspiration Tree, a white pine, in the forest of Sheerlund, about 4 miles southwest of Reading. It is called the Inspiration Tree be-

cause it is said that this tree inspired the owner of Sheerlund to begin his forestry work. In 1909 he started the development of his beautiful forest estate.

TEXAS

Matrimonial Oak, San Saba, a huge live oak commonly known as the Matrimonial Altar, stands like a deserted giant in the middle of a public road on the edge of the town. Tradition has it that, long before the white man invaded the valley, brave and daring Indian warriors and shy Indian maidens met beneath the boughs of this old oak. It is a well-known fact that some of the oldest and most prominent citizens of this section of the country were united for life under this tree. Even now, in the spring, especially in June, as many as three or four couples are married in the shade of the tree on a Sunday afternoon.

VIRGINIA

Marriage Trees—oaks on the line between Maryland and Virginia, on the Eastern Shore. This division between the two colonies was made in 1663, and in running the line a number of sturdy old oak trees were selected as boundary monuments. On the northern side of the line, in the shade of one of the Marriage Oaks, the Maryland justices and parsons made marriage easier for runaways from "farther down."

WASHINGTON

Road of Remembrance—a thousand elms planted along 8 miles of road near Seattle, as the beginning of Memorial Way, dedicated to the soldiers of the State of Washington who died during the World War.

HEADS OF TREE FAMILIES

CALIFORNIA

Parent Washington Navel Orange Tree. One of two trees sent to Mrs. L. C. Tibbets, Riverside, in 1873, from the United States Department of Agriculture, which had received 12 navel orange trees at Washington, D. C., from Bahia, Brazil, in 1871. Propagations were made from these trees by budding onto sweet orange seedlings in the greenhouse at Washington and distributed to growers, largely in Florida, but the variety was not commercially successful there. However, the oranges from the two trees sent to California were found to be so superior that the trees became the foundation of the entire commercial navel-orange industry of the Southwest and of most foreign countries. One tree, which the executor of the Tibbets estate gave to the city of Riverside, was moved in February 1902 to the little parkway at the intersection of Magnolia and Arlington Avenues, not far from its original location, and there it still stands.

The other parent tree, which was transplanted to the courtyard of the Glenwood Mission Inn by President Theodore Roosevelt in 1903, died in 1921. This Parent Washington Navel orange tree was replaced by a "child" tree (fig. 30), which had been propagated from it. (Reported by C. S. Pomeroy, associate pomologist, Bureau of Plant Industry, U. S. Department of Agriculture.)

F–321103

FIGURE 30.—PARENT WASHINGTON NAVEL ORANGE TREE, RIVERSIDE, CALIF. (COURTESY C. S. POMEROY, BUREAU OF PLANT INDUSTRY.)

MASSACHUSETTS

Old Lindens at Plymouth. About the year 1750 a ship captain brought to Plymouth from England a few rooted cuttings of the European linden in a raisin box. Three of these were planted in the garden at the rear of the mansion of George Watson of Plymouth. From cuttings taken from these trees and planted about 1760 by Colonel Watson just within the line of the street, eight other trees have grown. At each end of the space occupied by these trees there is an inscription which reads, "Linden trees planted by Colonel George Watson, 1760." Many lindens have sprung from this same stock.

NEW YORK

Famous Weeping Beech (*Fagus sylvatica pendula*), at Flushing, Long Island, said to be the tree to which the origin of all the trees of its kind in the eastern part of the United States is traced.

Shipmast locusts (*Robinia pseudoacacia* var. rectissima Raber) (fig. 31). Among first ancestors of their kind in New York State, are several at Washington Inn, Roslyn, Long Island, and one on the grounds of Isaac R. Coles, at Glen Cove. This variety of locusts is said to have been introduced by Capt. John Sands (1649–1712), the tradition being that he brought seedlings from Virginia. During the Revolution, the smaller trees that grew from the first plantings were cut for posts by Revolutionary soldiers. The name "shipmast locust" came from the unusually straight trunk.

FIGURE 31.—ORIGINAL SHIPMAST LOCUST TREES, WASHINGTON INN, ROSLYN, N. Y. (COURTESY OF C. S. SWINGLE, SOIL CONSERVATION SERVICE.)

Black Walnut trees overshadowing the grave of Theodore Roosevelt at Oyster Bay, from which walnuts have been taken for planting by Boy Scouts all over the country as memorial trees to Theodore Roosevelt.

Gates Weeping Willow, Third Avenue and Twenty-second Street, New York City. About 1712 Alexander Pope, English poet, found a willow twig in a drum of figs sent to him by a friend who was traveling in Smyrna. From this twig grew the first weeping willow (*Salix babylonica*) in England. In 1775 a British officer brought a cutting of this tree to Washington's stepson, John Parke Custis, and this was the first weeping willow in the United States. A cutting from this tree, planted by General Gates, in 1790, has become the famous Gates Weeping Willow of New York City.

PENNSYLVANIA

Powhatan Oak, at the Amos E. Ball Tree Place, 1 mile northwest of Fredonia, Mercer County. This tree was grown from an acorn from the Powhatan Oak at Jamestown, Va.

Weeping Willow Tree, at the Amos E. Ball Tree Place, 1 mile northwest of Fredonia, Mercer County. This tree was a cutting from a weeping willow growing in Washington's garden at Mount Vernon, which in turn was developed from a cutting from the weeping willow at the grave of Napoleon at St. Helena.

White Willows (*Salix alba*) in Fairhill near Philadelphia. Benjamin Franklin has left us an interesting account of the introduction into Pennsylvania of the white willow, from a sprout brought in on a willow basket to Philadelphia. He gave the twig to Debby Norris, who planted it on her father's estate, Fairhill. It took kindly to the new environment and became the progenitor of the white willows in the Northeastern States.

RHODE ISLAND

Napoleon Willow, Providence. A Napoleon willow was brought from St. Helena about 1852 by a resident of Providence. When the tree was well grown, he gave a cutting from it to a relative in Wisconsin, and later transplanted back to Providence a cutting from the Wisconsin tree. (See Napoleon Willow, Madison, Wis., pp. 65–66.)

VIRGINIA

Washington Horsechestnut, on the corner of Charles and Fauquier Streets, Fredericksburg. This is the sole survivor of the 13 horsechestnuts planted by George Washington in 1782, on the estate of his sister, Betty, to honor the original 13 States of the Union. Scions have been taken from this tree at various times.

Onancock Cork Oak (*Quercus suber*), a few yards from the beautiful winding Onancock River. This is one of several trees of *Q. suber* smuggled out of Spain in 1847. Of the two planted at Cokesbury, in Accomac County, one died, as did one set in North Carolina. Except for one known to be in Cordele, Ga. (p. 76), this is thought to be the only cork oak in eastern North America.

Black Walnut Tree at Mount Vernon, from which walnuts have been taken for planting by Boy Scouts all over the country as memorial trees to George Washington.

Black Walnut Tree in Arlington Cemetery, formerly the Lee estate, from which walnuts have been taken for planting by Boy Scouts all over the country as memorial trees to Robert E. Lee.

Black Walnut Trees at Monticello, estate of Thomas Jefferson, from which walnuts have been taken for planting by Boy Scouts all over the country, as memorial trees to Thomas Jefferson. At the same time that black walnuts were being distributed by Boy Scouts, nuts from Mount Vernon, Arlington, and Monticello, were sent to most State capitols of the United States and to more than fifty American embassies for planting.

WISCONSIN

Napoleon Willow, Madison. On the shore of Lake Mendota, a row of handsome willows grown from cuttings brought from the grave

of Napoleon at St. Helena by a sea captain. (See Napoleon Willow, Providence, R. I., p. 65.)

TREES NOTABLE FOR UNUSUAL SIZE OR AGE

Trees, the giants of the plant world, have among themselves their own giants and veterans. Trees that outstrip or outlive their contemporaries become famous even when not directly associated with historic events or notable persons. In the pages that follow is a selected list of famous trees, the most outstanding of those claimants to size and age distinction that have been reported to the Forest Service.

These heroic individuals are not confined to regions peculiarly favorable to tree growth. The stories of the more than 200 trees listed have come from 37 States and the District of Columbia. A goodly number of species is represented. Oaks are the most numerous, sequoias the most celebrated; elms and pines are outstanding.

This tree history is by no means complete, and it is likely that many of those who use it can make additions from their own knowledge of trees notable for great size or age, or both. However, even this partial list of tree giants and veterans will give some idea of the unusual capacity for growth and endurance shown by many kinds of trees.

Which is the largest tree in the world?

The term "largest" is relative. There may be many answers to the question, depending on whether the criterion of size is height, girth, or volume of wood content. An authentic statement also would require more complete records of individual trees than have been furnished in many cases.

Different kinds of trees grow differently and vary in regard to usual height, circumference of trunk, spread of branches, volume, and span of life. In studying those trees with reputations for unusual size and age, therefore, consideration has been given to the usual size and age of members of the group to which the outstanding individual belongs, for purposes of comparison. The range of the species is also considered.

Which is the oldest tree in the world?

The determination of the age of the living tree is generally the most difficult thing in its history. It is usually mere guesswork or hearsay, depending upon association with some historic event or personage or upon the memory or tradition of local residents. Definite record of age is found only in the count of the annual rings of tree growth—succession of springwood and summerwood. Years of unusual weather conditions may affect even this tree calendar. The story of the annual rings is sometimes read on cores obtained by the use of an increment borer, but this instrument has not been manufactured in sufficient length to reach the heart of a very large tree.

OLD OR LARGE TREES IN THE UNITED STATES

For a detailed study of species, growth habit, and range of different trees, helpful information may be found in the following reference book and publications:

Manual of the Trees of North America, by Charles Sprague Sargent.

Check List of the Forest Trees of the United States, Their Names and Ranges. United States Department of Agriculture, Miscellaneous Circular 92. For sale by Superintendent of Documents, Government Printing Office, Washington, D. C. Price 40 cents.

Forest Trees and Forest Regions of the United States. United States Department of Agriculture, Miscellaneous Publication 217. For sale by Superintendent of Documents, Government Printing Office, Washington, D. C. Price 15 cents.

Arbor Day, Its Purposes and Observance. United States Department of Agriculture Farmers' Bulletin 1492. For sale by Superintendent of Documents, Government Printing Office, Washington, D. C. Price 5 cents.

The list of trees of unusual size or age that follows, which is necessarily incomplete, is arranged geographically by States, each State list being subdivided alphabetically by kinds of trees.

ALABAMA

There is a large *Ailanthus altissima* near Florence. It has a circumference of 16½ feet, 4 feet above ground and a height of about 55 feet. The base of the tree is hollow, but otherwise its condition seems sound. No one knows its age, but 50 years ago the diameter was about half what it is now. This description is from correspondence between W. N. Tharp, of Florence, Ala., and E. N. Munns, Chief, Division of Silvics, Forest Service. Pennsylvania Department of Forests and Waters Bulletin 38 (*47*) is one of the best sources of information on ailanthus.

ARKANSAS

Near Luxora there is a catalpa tree which, when measured, showed a circumference of 16 feet and a height of 75 feet. Its story is told by the American Genetic Association, as a part of a report of the tree contest sponsored by that association (*6*, *54*).

A persimmon tree at Luxora has a circumference of nearly 22 feet. It has a height of 130 feet (*6*, *54*).

CALIFORNIA

An incense cedar (*Libocedrus decurrens*) in the Trinity district of the Shasta National Forest has a circumference of 26 feet 4 inches, according to Ranger Alvin E. Noren, of the Modoc National Forest, who reported it in September 1924.

In 1918 an incense cedar near Morgan Springs, Tehama County was reported as having a diameter at breast height [4] of 8 feet, which means a circumference of 25 feet.[5] It is credited with a height of 120 feet and a volume of 9,700 board feet (*69*).

McCubbin Manna Gum (*Eucalyptus viminalis*), growing in Tulare County between Reedley and Dinuba, was planted in 1889 by J. C. McCubbin, who has kept consistent records of its growth. The 1934 measurement showed it to be 22 feet in circumference at breast height and between 125 and 150 feet tall, at 45 years of age. This tree was reported to the Forest Service by Woodbridge Metcalf, extension forester, University of California, April 26, 1935.

A blue gum (*Eucalyptus globulus*) on the grounds of Clark's nursery west of the highway between Milpitas and San Jose in Santa Clara County, is known as the Aram Blue Gum from Joseph Aram.

[4] Breast height, measured 4½ feet above ground.
[5] Given the diameter, multiply it by 3.14 to get the approximate circumference.

who established a nursery at this place in 1856 and probably planted this tree sometime in the sixties. It is therefore about 20 years older than the McCubbin Manna Gum. When measured on April 10, 1935, it had a circumference of 25 feet at breast height, the largest of any eucalyptus tree in California, but it is about 25 feet shorter than the McCubbin tree and much shorter than the blue gum trees on the Berkeley campus. This tree also was reported by Woodbridge Metcalf, University of California, April 26, 1935.

There is a very symmetrical specimen of *Eucalyptus globulus* at the Shinn place near Niles, Alameda County. It measures about 16 feet 9 inches in circumference and 130 feet in height. Mrs. Julia T. Shinn, wife of Charles Howard Shinn who was active in the early days of the College of Agriculture, University of California, and, for years, the supervisor of the Sierra National Forest at North Fork, has this to say of the tree:

> It was a "runt" in a flat of eucalyptus seedlings grown in the Shinn Nursery about 1870. My husband, helping his father in the nursery, was transferring the seedlings to larger quarters, and his father condemned this one as not worth room. So Charles, as he told me long afterwards, poked his finger into the ground and put the tiny thing in, staking and watering it when it refused to die. (*88, 94.*)

Mrs. Shinn was thus quoted by Woodbridge Metcalf to the Forest Service in a letter dated May 18, 1935, after visiting the Shinn tree.

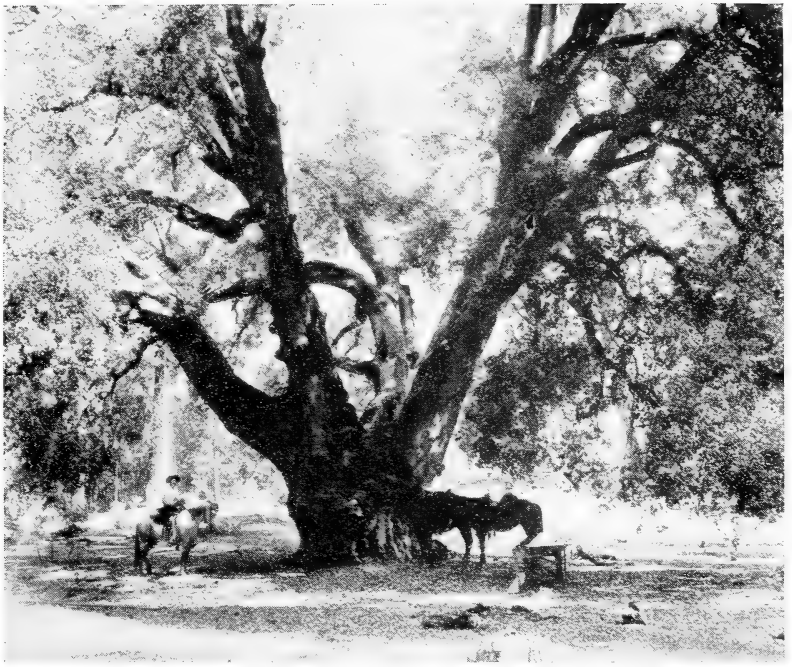
Moreton Bay Fig (*Ficus macrophylla*), at Twentieth Street and Compton Avenue, Los Angeles, has a girth of 21 feet 3 feet from the ground and is estimated to be 60 feet tall. It has a branch spread of 113 feet east to west and 116 north to south. Another tree of the same species is reported as growing on Cedar Street, Glendale, with a circumference of 14.3 feet, a height of 86 feet, and a spread of 78 feet.

About one-half mile west of the west end of Carson Spur on the Carson Pass State Highway across the Eldorado National Forest, stands a juniper of which it has been said: "It is questionable if there is any other juniper tree in America of equal or greater size." This giant of the species is 31 feet 8 inches in circumference breast high. Although 76 feet tall, it does not show its height to advantage because of the large size of the limbs and the excessive amount of foliage. This tree is very close to a well-traveled highway and grows on a south slope at an altitude of over 7,000 feet.

A remarkable California Laurel (*Umbellularia californica*), growing at 624 Lowelling Street, San Lorenzo, Alameda County, breaks into six large trunks about 5 feet from the ground. The tree, where it is smallest, 3 feet from the ground, has a circumference of 29.3 feet. It is approximately 70 feet tall, with a crown diameter of 85 feet, and, when examined, was bearing an enormous crown of flowers. This tree also was reported by Woodbridge Metcalf, on March 20, 1936.

In this collection of tree stories, there are several famous oaks in the far West:

A Canyon Live Oak (*81*) (*Quercus chrysolepis*), on the Stanislaus National Forest, 8 miles east of Tuolumne, has a circumference of 31½ feet, a height of 60 feet, and a branch spread of 131 feet. Its estimated age is 700 years. In 1920 the people of Tuolumne County subscribed $750 for the services of a tree doctor to preserve this tree (fig. 32).



F-176962

FIGURE 32.—CANYON LIVE OAK, STANISLAUS NATIONAL FOREST, CALIF.

San Benito Valley Oak (*Quercus lobata*), in San Benito County, (6, *54*, *71*) has a circumference of 37½ feet, a height of 125 feet, and bears a ton of acorns in a good season.

Sir Joseph Hooker Oak, one of the finest specimens of valley white oak (*Quercus lobata*), north of Chico, in a park deeded to Chico by the widow of Gen. John Bidwell, who had entertained Sir Joseph Hooker, an English botanist, in 1877 (*6*, *9*, *48*, *54*, *80*, *81*), has been variously estimated as having a circumference of 24 to over 28 feet 6 feet from the ground and a height of 105 to 110 feet. Its spread of branches is 150 feet in diameter, the outer circumference of its shade being at least 450 feet.

Another splendid specimen of *Quercus lobata*, 130 feet high, is in the Ojai Valley, and the Henley Oak in Round Valley is 150 feet tall and over 25 feet in circumference (*81*).

The superintendent of the C. C. C. Bouquet Canyon Camp on the Angeles National Forest tells of what he believes to be the largest coast live oak (*Quercus agrifolia*) in southern California. It is 34⅓ feet in circumference 5 feet from the ground, has seven limbs, one of which is 13 feet in circumference, a crown spread of 150 feet in diameter, is 100 feet tall, and is estimated to be 1,000 years old. A spring beneath its shade and a trail leading to the spot make this tree pleasant to visit and easy of access.

A "white or native oak" at Gridley has a circumference of 25½ feet 5 feet from the ground, is 123 feet tall, and has a branch spread of 139 feet east to west and 134 feet north to south, according to

Clyde H. Pitney, secretary of the Gridley District Chamber of Commerce, in a letter to the Forest Service dated February 20, 1920.

A sugar pine on the Tahoe National Forest has a circumference of over 34 feet and is 235 feet tall, according to a field report of forest supervisors in connection with the preparation of a sugar pine monograph.

Joe Elliott giant sugar pine, the largest known conifer in southern California, dedicated to Joe Elliott, supervisor of the San Bernardino National Forest, 1929 to 1935, by the residents of San Bernardino County. This giant tree is 23 feet in circumference and 140 feet high. This tree story comes from Forest Region 5, bulletin, October 18, 1935.

Another writer (*25*) says:

> All who have entered or left Yosemite National Park by way of Stockton or Tioga Pass over the Big Oak Flat Highway will remember the trip for one reason—the magnificent forest of immense sugar and yellow pines that line the road from Tuolumne Sequoia Grove to Carl Inn.

A ponderosa pine on the Shasta National Forest has a circumference of 23 feet 1 inch, according to Alvin E. Noren, forest ranger on the Modoc National Forest, which adjoins the Shasta National Forest.

A lodgepole pine on Mammoth Trail, near Granite Stairway, Sierra National Forest, has a circumference of nearly 22 feet and a height of 80 feet, as reported by Supervisor Paul G. Redington and Ranger W. R. Taylor, of the Sierra National Forest, September 2, 1912.

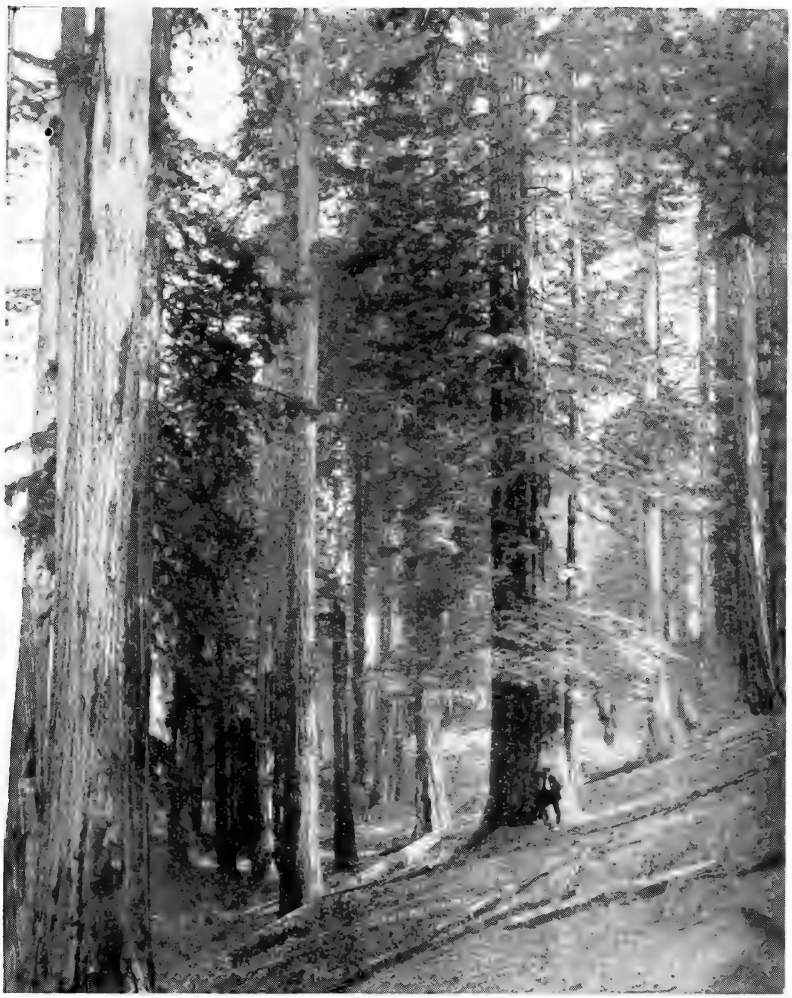
Sequoia, a genus of pinaceous trees, named in honor of Sequoiah, who invented the Cherokee alphabet, has only two species—*S. washingtoniana*, the bigtree of California, and *S. sempervirens*, the redwood of Oregon and of California. *S. washingtoniana* was formerly designated as *S. gigantea* and at present by some authors as *S. wellingtonia*. *Sequoia*, heroic figure of the tree world, widely scattered with several species over the Northern Hemisphere during the Cretaceous and Tertiary epochs, is now confined to the coast of Oregon and California and the mountains of California. The redwood occurs in southwestern Oregon and southward near the coast to Monterey County, but is rarely found more than 20 to 30 miles from the coast or beyond the influence of ocean fogs, or over 3,000 feet above sea level (fig. 33).

The bigtree is found on the western slopes of the Sierra Nevada at elevations of 5,000 to 8,400 feet above sea level (*62*).

The result of the work of several engineers to settle rival claims for the honor of possessing the largest tree in the world, gives General Sherman Bigtree a volume of 600,120 board feet; General Grant Bigtree, 542,784 board feet; Boole Bigtree, 496,728 board feet; and Hart Bigtree, 410,952 board feet (*100*).

According to the latest reports, General Sherman Bigtree (*Sequoia washingtoniana*) (fig. 34), Sequoia National Park, has a diameter of 36½ feet or a circumference of nearly 115 feet, a height of 272.4 feet, a volume of 600,120 board feet, and it is between 3,000 and 4,000 years old. The sequoias were measured by engineers representing the California State and Fresno Chambers of Commerce (*18*, *19*, *34*, *51*, *88*, *96*, *102*).

General Grant Bigtree, General Grant National Park (*43*, *51*, *99*), has a base circumference variously estimated at from 106 to 125 feet.



F-48712

FIGURE 33.—DENSE STAND OF CALIFORNIA REDWOODS.

Two writers refer to it as 264 feet tall, and two others report it as 267 feet tall. A mere 3-foot difference in the height of a sequoia is immaterial, except in competition for greatest size. However, volume is the measurement that has naturally led to the decision on the largest tree, and comparison of the General Grant with the General Sherman shows that the latter has about 58,000 more board feet. (See General Sherman Bigtree, p. 70.)

Grizzly Giant Bigtree, in Yosemite National Park, has a circumference at base variously estimated at from nearly 87 to more than 97 feet. One authority gives it a circumference of about 63 feet at 11 feet; another, nearly 65 feet at about 10 feet. Its height has been variously estimated at from 200 to 209 feet. Its age is estimated at 3,800 years (*19*, *31*, *43*, *81*, *96*, *101*).

F—48731

FIGURE 34.—GENERAL SHERMAN BIGTREE, SEQUOIA NATIONAL PARK, CALIF.

During the fall of 1934 a windstorm felled one of Yosemite's big trees estimated to have been nearly 2,000 years old and mighty, even in overthrow (*24*). This old sequoia was widely known as the Stable Tree because of a great burned-out place in its base in which horses were stabled in stage-coach days. It was 92½ feet in circumference at its base and 269 feet high; these measurements show it to have been a rival of the Grizzly Giant in life.

A redwood (*Sequoia sempervirens*) in the Humboldt State Redwood Park, near Dyerville, Humboldt County, is said to be "the tallest tree now known." It is 364 feet high. This redwood has been dedicated to the founders of Save-the-Redwoods League and is therefore called the Founders Tree (*26*, *81*, *88*, *94*).

Professor Starker says in his article on the Giant Growers of the Globe (*88*), following a description of the Founders Tree: "But not far away in Bull Creek flat is another redwood reported to be 345 feet high."

General Grant Redwood, Santa Cruz County, is credited with a base circumference of 56½ feet and a height of 300 feet (*51*).

A redwood in Big Lagoon tract on Maple Creek, Humboldt County, has a circumference of 62.8 feet outside the bark 5 feet from the ground and a height of 308 feet. It scales 361,366 board feet—Spaulding scale—"enough to build 22 average houses" (*94*).

"The Paradox Walnut" of Yuba, so-called because it is a cross between the California black walnut and the Persian (English) walnut, is undoubtedly the largest walnut tree in California. It has a circumference of 18 feet 7 inches, 4 feet above ground, a height of 90 feet, and a branch spread of 108 feet (*6*, *13*, *54*).

COLORADO

A limber pine (*Pinus flexilis*) 18.8 feet in circumference at breast height, and 67 feet tall, is on the Huerfano district of the San Isabel National Forest. This tree was reported by Paul Gilbert, district forest ranger of the Huerfano district of the San Isabel National Forest, in the Rocky Mountain Region Bulletin for December 1936. He reports this tree as growing on an eastern exposure in a mixed stand of ponderosa pine, Engelmann spruce, and a scattering of Douglas fir, at an elevation of 8,500 feet and says that it is not defective in any way.

An Engelmann spruce on the Gunnison National Forest has a circumference of more than 15 feet and is 164 feet tall, as reported by Supervisor Kreuger on March 10, 1930, from measurements taken by him and Ranger Heilman on July 8, 1929.

CONNECTICUT

The canoe birch at Warehouse Point, Hartford County, has a circumference of 8 feet 5 inches 4 feet from the ground, and a branch spread of 73 feet. It is 75 feet tall (*66*, *p. 23*).

The Great Elm at Wethersfield (*3; 5; 6; 15; 66*, *p. 24; 71; 105*, *p. 80*), has been acclaimed as "the largest living elm in the United States"; and when the results of the contest of the American Genetic Association, 1915 (*6*, *54*) in its search for outstanding trees, were published, it was announced that "in all probability there is no living elm larger than the Great Elm at Wethersfield, Conn." This contest was far-reaching and brought forth stories and photographs of 337 trees. Nevertheless, comparison with records of other elms show close competition. (Compare with descriptions of the Rugg Elm, Framingham, Mass., and of the Gowanda, Italy Hollow, and Markham elms of New York, and the Elmshade tree in Canton, Conn.) The Great Elm at Wethersfield stands on the east side of the Broad Street Green, and the sign on it reads: "The Great Elm is 9 feet 6 inches in diameter, 29 feet 6 inches in circumference. Age 172 years, 1930." It is credited with a height of 100 feet and a branch spread of about 150 feet. Tradition has it that Charles Wesley preached under the spreading branches of this elm (*fig. 35*). Newspaper reports indicate this tree was destroyed by the storm of September 21, 1938.

F-30524

FIGURE 35.—THE GREAT ELM, WETHERSFIELD, CONN.

The beautiful old elm in front of Elmshade at the head of the green in Canton, Hartford County (*66, p. 25*), is nearly the size of the Wethersfield elm. One owner of Elmshade has stated that the elm was a good-sized tree when the house was built, in 1784.

Revolutionary Tree (an elm) at Redding, Fairfield County (*66, p. 19*), has a circumference of 30 feet 6 inches 1 foot from the ground. Its branches have a spread of 112 feet. On the site near this elm stood the house of the Widow Sanford where Continental officers banqueted in 1779.

Bolleswood, which contains a grove of ancient hemlocks, was deeded to Thomas Bolles, of New London, by Owaneco, sachem of the Mohegan Indians, in 1693. It has remained practically untouched since the days when the Indians held council there (*66, p. 31*).

Cogswell Maple (species not given) at New Preston, Litchfield County, is said to be the largest maple in Connecticut. It is on property owned by a lineal descendant of William Cogswell. The house on this property was once an inn where George Washington was entertained on one of his trips to Connecticut (*66, p. 12*).

Giant Oak, at West Ashford, (*66, p. 33*), was awarded the first prize offered for the largest tree entered in a State tree contest in 1927. It has a circumference of 21 feet at breast height. Its height is 95 feet, and its horizontal branch spread is 135 feet.

At Easton (*66, p. 14*), there is a white oak about 300 years old on the lawn in front of the house built in 1730 by Isaac Bennett. The circumference of its trunk is 16½ feet, and its branch spread is 125 feet.

Johnson Oak, at Northford (*66, p. 21*), stands on property purchased by Nathaniel Johnson in 1714, which remained in the Johnson family until 1916. The measurements of this tree in 1800 were as follows: Circumference of trunk, 30 feet; branch spread, east and west 111 feet, north and south 107 feet.

"Cathedral Pines," at Cornwall, Litchfield County, had a maximum height in 1922 of 125 feet. They are known to have been in the possession of one family for over 200 years. The United States Geological Survey has said of them that "they are the finest bit of original forest in the Eastern States and not surpassed in the Lake States" (*66, p. 13*).

A sycamore of good old age is the Revolutionary Sycamore, at Danbury, Fairfield County. According to the record, this tree was standing at the time of the settlement of Danbury in 1685 (*66, p. 17*).

DISTRICT OF COLUMBIA

Twin sassafras trees, on Soldiers' Home Grounds, are said to be the oldest living things in the District of Columbia. This was the opinion of Humboldt, the German naturalist, verified by W. W. Corcoran, whose estate adjoined the Soldiers' Home (*52, p. 69*) (fig. 36).

FLORIDA

A so-called sovereign cypress in the dense swamp between Sanford and Longwood, is supposed to have been a denizen of this section before Ponce de Leon sought the Fountain of Youth (*59*). There is space enough for a roadway to be cut through the trunk.

F–321119

FIGURE 36.—TWIN SASSAFRAS TREES, SOLDIERS' HOME GROUNDS, WASHINGTON, D. C., SAID TO BE THE OLDEST LIVING THINGS IN THE DISTRICT OF COLUMBIA

The Florida Forest Service in a letter of April 18, 1935, to the Forest Service, says this cypress has a circumference of 54 feet, a height of 125 feet, and an estimated approximate age of 3,000 years.

A red oak at Chipley with a circumference of about 25 feet 3 feet from the ground, a height of 60 feet, a spread of 65 feet, at only 20 years of age, was reported by the American Genetic Association in September 1915. The description of the red oak at Chipley was included in the full list of tree contestants in the 1915 contest of the American Genetic Association sent to the Forest Service by the association.

Old Pisa is a giant oak 2½ miles south of Daytona (*10*, *pp. 284–287*). It has a circumference of 35 feet at the base and its branches extend over almost an acre of ground. It is believed to have been an old tree when Daytona was the Indian village, "Autumcas."

GEORGIA

A cork oak (*Quercus suber*) on the edge of a cottonfield, a half mile north of Daphne station, west of Cordele (*53*), is said to be "undoubtedly the largest specimen of cork oak in the country, probably brought from Spain by a southern planter." It has a circumference of nearly 12 feet at 1 foot from the ground, is 60 feet tall, has a branch spread of 60 to 70 feet, and is more than 100 years old.

In a public park at Brunswick (*9*) there is a tree, a veteran in 1763, which was called Lovers' Oak by the Indians of the locality. It is claimed for this tree that it is the "largest live oak in the South."

A foot above the ground its circumference is 28 feet. (Compare Old Pisa, near Daytona, Fla., and Locke Breaux, Arnaud Robert, and George Washington live oak in Louisiana.) With the sun directly overhead, the shadow of Lovers' Oak measures 90 feet in diameter.

Big Oak, a live oak (*Quercus virginiana*), at Thomasville has a circumference of 19 feet, a height of 47 feet, a branch spread of 133 feet, and is about 200 years old. (See Trees that have had special protection, p. 56.)

Oglethorpe Oak (*Quercus virginiana*), in Savannah, Ga., with a circumference of 21 feet 6 inches at about 5 feet from the ground and a spread of 114 feet, was reported by the American Genetic Association in September 1915 (*54*).

A loblolly or old-field pine (*Pinus taeda*) about 4 miles north of Gordon, Wilkinson County, in the swamp of Great Commissioner Creek, on an island subject to overflow, has a circumference of 19 feet at 3 feet from the ground and is 125 feet tall (*40*). It has been estimated that this tree would cut about 16,000 feet of lumber, but it is hoped that it will be preserved as an example of what nature will do if unhindered.

IDAHO

A western red cedar on the Washington Creek drainage not far from Headquarters, Clearwater County, Idaho, which was still standing July 31, 1931, has been acclaimed as the "largest western red cedar so far recorded in Idaho." It has a circumference at breast high of 39.4 feet. This tree was reported by Elers Koch, assistant regional forester, and J. A. Fitzwater, forest inspector of the Forest Service.

A lowland white fir (*Abies grandis*) near the top of Moscow Mountain is reported by Floyd L. Otter, instructor, School of Forestry, University of Idaho, as having a circumference of more than 14 feet at breast height.

An estimate of the ages of the large cedars (junipers) of the Roosevelt Grove in the Kaniksu National Forest, near Priest River, gives the ages as between 2,000 and 3,000 years, as reported by Floyd L. Otter (1929), instructor of forestry, School of Forestry, Moscow.

C. K. McHarg, Jr., of the northern forest region, reports a western white pine on the Little North Fork of the Clearwater River, in Idaho, which has an estimated diameter, breast high, of 7 feet, meaning a circumference of about 22 feet.

A western white pine growing on land of the Potlatch Lumber Co., 20 miles from Moscow, was 207 feet tall and 425 years old, when reported in 1912 (*2*).

A mountain willow (*Salix scouleriana*) near the top of Moscow Mountain is reported by Floyd L. Otter, instructor, School of Forestry, University of Idaho, as being more than 5 feet in circumference at breast height.

ILLINOIS

The State forester of Illinois reports a cypress in Massac County having a height of 137 feet with the reputation of being "the tallest tree in the State."

A bur oak in Brownfield Woods, Urbana, almost 16 feet in circumference and 104 feet tall, is reported by State Forester R. N. Miller.

INDIANA

According to C. R. Tillotson, of the Forest Service, in a letter of March 21, 1919, to John Gill, Haddon Farm, Haddonfield, N. J., the largest white oak on record at that time was one at Atwood, the circumference of which was 21 feet. However, this list includes several later-known rivals.

An oak near Warsaw (*20*) has a circumference of very nearly 22 feet.

A sycamore (*Platanus occidentalis* L.) at Worthington, Greene County, about 70 miles southwest of Indianapolis, was adjudged the largest shade tree in the United States in the 1915 contest of the American Genetic Association. It has a circumference of 42 feet 3 inches at about 5 feet from the ground; a height of 150 feet; and a branch spread of about 100 feet (*4*, *5*, *6*, *54*).

A large sycamore at East Mount Carmel was reported by V. W. Agniel, of Princeton, July 16, 1920, to the Forest Service, as found while making a survey along the Wabash River; Mr. Angiel gives the measurements as about 34½ feet in circumference and about 150 feet in height.

IOWA

Lincoln Memorial Hackberry is 110 feet high and nearly 12 feet in circumference (*10*, *v. 26*, *p. 514*). (See Trees associated with notable people, p. 9.)

Twin cottonwoods, 80 feet in height, are reported from Solon.

KANSAS

A cottonwood east of Engelwood has a circumference of 31 feet and is said to be the largest tree in Kansas (*103*, *pp. 12–14*).

KENTUCKY

An oak in Harrison County with a circumference of 31 feet 5 feet from the ground, a height of 125 feet, and a spread of 70 feet was reported by the American Genetic Association in September 1915 (*6*, *54*).

A sassafras on a farm near Glendale, Hardin County, was reported as having a circumference of 14 feet 6 feet above ground (*37*).

LOUISIANA

A cypress tree estimated to be 1,300 years old and measuring 16,175 board feet in volume when cut recently in the Amite River swamp in Livingston Parish, is reported by Extension Forester Robert Moore of Louisiana State University. The age was calculated by counting the annual rings. The tree had a merchantable length of 86 feet 8 inches, measured 7 feet 8 inches across the stump, and was sound throughout (*98*).

A sweetgum near Urania has a circumference of 18.8 feet and a volume of 10,580 board feet, according to the late Henry E. Hardtner, president of the Urania Lumber Co.

Edwin Lewis Stephens, president of Southwestern Louisiana Institute, says (*89*, *90*): "I at present number among my personal acquaintance 43 live oaks whose individual age is not less than 100

years." First on the list he puts the Locke Breaux Live Oak, on the right bank of the Mississippi River, 4 miles above Hahnville, in St. Charles Parish. Measured January 22, 1932, by Dr. Stephens and the owner of the tree, Samuel Locke Breaux of New Orleans, it showed a circumference of 35 feet, a height of 75 feet, and a branch spread of 166 feet. It is probably nearer 200 than 100 years old (fig. 37).

Second on the list, Dr. Stephens describes the Arnaud Robert Live Oak, 6 miles above Breaux Bridge, in St. Martins Parish, about a mile west of the Teche. Dr. Stephens visited it in company with the late Albert E. Winship, of Boston, on September 18, 1932, and found its circumference to be 33 feet 10 inches, its height 87 feet,

F—288640

FIGURE 37.—LOCKE BREAUX LIVE OAK, ST. CHARLES PARISH, LA.

and its branch spread 135 feet. This tree, also, is probably 200 years old.

Others of Dr. Stephens' list with a girth of more than 25 feet are:

George Washington Live Oak, in Audubon Park, New Orleans, which measured 28½ feet around on October 9, 1932. P. H. Fontaine, of Kentwood, contributes an interesting description:

> In the summer of 1897 I measured the George Washington Oak (*92*, p. 20) in Audubon Park. Four feet from the ground its circumference then was 22 feet. Comparison of this with my measurement of the tree in 1932, when I found it to be 28 feet 6 inches around, shows that during that period of 35 years there was an increase in circumference of 6 feet 6 inches—or 78 inches. Dividing 78 by 35, we get an average annual increase of 2.23 inches, which approximates closely the annual growth of the 18 live oaks on Southwestern campus that were set out January 1, 1901. Their average annual increase was 2.4 inches.

Luling Oak, on the right bank of the Mississippi, by the side of the Old Spanish Trail (U. S. 90), a quarter of a mile south of Luling, measured in September 1930, showed a circumference of 27 feet 8 inches.

Martha Washington Live Oak, in Audubon Park, New Orleans, has a circumference of 27½ feet.

Mays Live Oak, on the right bank of Bayou Grosse Tete, on Live Oak Plantation at Rosedale, has a circumference of 27½ feet.

Seven Sisters, on the old Lastrapes place, in St. Landry Parish, near Washington (one dead); others in two clusters (of three each) measuring 26 feet 4 inches to 27 feet 3 inches in circumference.

Jamison Oak, on the Preston Pugh plantation near Thibodaux in Lafourche Parish, has a circumference of 27 feet 2 inches and a branch spread of 140 feet.

Kaplan Oak, 4 miles above the mouth of the Bayou Vermillion near the Intracoastal Canal, has a circumference of 27 feet 1 inch.

Big Double Live Oak at Parks on the Teche when measured on March 3, 1931, showed a circumference of 27 feet.

Fredericks Point Live Oak (*92*, *p. 17*), in Terrebonne Parish, has a trunk measuring 32 feet and is a venerable tree. As a result of battling for centuries with tropical storms, it is now in a deplorable condition, but it is said that funds will be made available for its rehabilitation.

A live oak, known as Grandpere (*92*, *p. 19*), in Marrero, Jefferson Parish, has a circumference of 29 feet 6 inches, with a spread of 155 feet.

Wesley Schriefer Live Oak (*92*, *p. 19*) has a circumference of 26 feet 8 inches. It is located at Perry, near Abbeville. The Standsbury home was built in front of this tree 150 years ago.

Oak Alley Live Oaks (*92*, *p. 19*), a wonderful avenue, situated on the Mississippi River, in St. James Parish, has 28 trees, 14 on each side, all large, perfect, and healthy. One of them is 22 feet 8 inches, and there are others over 22 feet in circumference. The alley from the mansion to the highway next to the levee on the south side of the Mississippi River is from 700 to 800 feet long. The arch formed by the trees is most symmetrical and beautiful. It is said the house was built by Governor Roman in 1836, and the oaks were planted at that time. (See also De La Ronde Oaks, Trees associated with the building of the Nation, p. 27.)

Hohen Solms pecan (fig. 38), on the west bank of the Mississippi River, 36 miles south of Baton Rouge, a tree which, in 1927, the

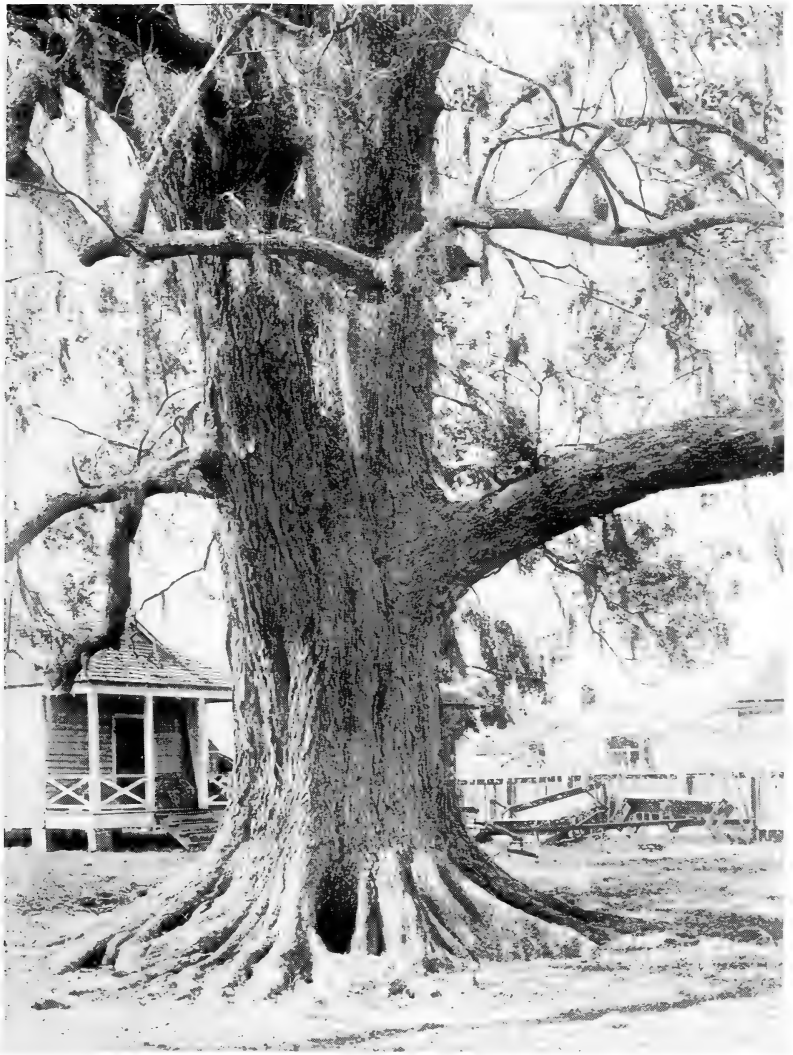


FIGURE 38.—TYPICAL LARGE PECAN NEAR HOHEN SOLMS, LA., WEST BANK OF THE MISSISSIPPI RIVER, 36 MILES SOUTH OF BATON ROUGE, LA. (COURTESY OF C. A. REED, BUREAU OF PLANT INDUSTRY.)

National Pecan Growers' Association designated as the largest pecan in the United States. At the time it had a circumference of 21 feet. (Compare with Jumbo, a pecan in San Saba, Tex., p. 94.)

MARYLAND

An ailanthus near Carmichael has a circumference at breast height of 16 feet 1 inch, according to measurements of the State department of forestry reported June 1, 1928.

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A basswood with a circumference of 10 feet 4 inches at breast height, a height of 84 feet, and a branch spread of 85 feet, is reported by Mrs. John F. Symington, of Rodgers Forge, according to the State department of forestry.

An English beech belonging to Mrs. W. J. Starr, near Easton, is 13½ feet in circumference, with a height of 85 feet and a spread of 81 feet, as measured by the State department of forestry in 1928.

A dogwood owned by S. F. Baldwin, near Collington, Prince Georges County, measures 5½ feet in circumference, 18 feet in height, and 35 feet in spread of branches, according to the State department of forestry.

A hackberry near Venton, Somerset County, measuring 12 feet 2 inches in circumference, 86 feet in spread, and 68 feet in height, has been reported by its owner and measured by the State department of forestry.

A hemlock at Swallow Falls, Garrett County, was reported as having, when measured by a representative of the State department of forestry on June 1, 1928, a circumference of 8 feet 11 inches, a height of 108 feet, and a branch spread of 40 feet.

A red cedar (*Juniperus virginiana*) on the place of Mrs. W. J. Starr, near Easton, is 11 feet 7 inches in circumference, is 52 feet tall, and has a branch spread of 43 feet, according to the measurements of the State department of forestry, reported June 1, 1928.

A Kentucky coffeetree near Cecilton, 12½ feet in circumference, 72 feet in branch spread, and 105 feet tall, was reported by the owner, Mrs. Kate McLane, and measured by the State department of forestry. It was reported by the department on June 1, 1928.

A black locust measuring 12 feet 11 inches in circumference, 73 feet in height, and 67 feet in branch spread, near Glyndon, and a honeylocust measuring 16 feet in circumference, 88 feet in height, and 125 feet in spread of branches, near Centerville, were reported by the State department of forestry June 1, 1928.

Outstanding representatives of red and sugar maples are reported by owners from near Forest Hill and Sang Run. A red maple near Forest Hill, in 1928 measured 16¼ feet in circumference, 68 feet in height, and 57 feet in spread of branches. The sugar maple measured 16⅓ feet in circumference, 105 feet in height, and 84 feet in branch spread. Both of these trees were measured by a representative of the State department of forestry.

On a farm about 1 mile from Hyattstown, Frederick County, there is a red oak which has a circumference of 22 feet 1½ feet from the ground. This tree was reported by M. D. Hyatt, of the Navy Department, Newport News, Va., to the Forester, U. S. Department of Agriculture, July 17, 1922.

A white oak near Landover, Prince George County (*16*) has a circumference of 25 feet 1 inch at breast height, a height of 85 feet, and a branch spread of 96 feet. It was officially measured by a representative of the State department of forestry and reported June 1, 1928.

A white oak owned by James E. Steuart, at Annapolis (*16*), has a circumference of 22 feet 7 inches, a height of 99 feet, and a branch spread of 114 feet.

Wye Mills Oak (fig. 39), a white oak about 9 miles from Easton. According to an inscription on a tablet attached to the tree, it has a

FIGURE 39.—WYE MILLS OAK, A MAGNIFICENT WHITE OAK ABOUT 9 MILES FROM EASTON, MD. (COURTESY OF DORIS W. HAYES, FOREST SERVICE.)

circumference of about 20 feet and a branch spread of 140½ feet (29). In 1930 it was 391 years old.

Spanish oak is a name used in Maryland and other nearby and Southeastern States for southern red oak. An outstanding tree of this species is reported by the owner near Sudley, and by the State department of forestry (June 1, 1928), as measuring 23 feet 5 inches in circumference, 105 feet in height, and 129 feet in spread of branches.

A giant willow oak reported by its owner near Easton, and measured by a representative of the State department of forestry, has a circumference of 21 feet, a height of 103 feet, and a branch spread of 97 feet.

A loblolly pine near Carmichael, reported by the owner in 1928 and measured by the State department of forestry, has a circumference of 16 feet 4 inches, a height of 84 feet, and a branch spread of 105 feet.

A Carolina poplar was reported by the owner at Preston through the State department of forestry, June 1, 1928. That department reports that the tree's circumference is 14 feet, its height 110 feet, and its branch spread 106 feet.

A sassafras at Sandy Springs, measured by a member of the State department of forestry, has a circumference of 12 feet 1 inch 4½ feet from the ground, according to E. N. Munns, Chief of the Section of Silvics, Forest Service, in a letter to S. A. Casey, Lebanon, Mo., dated November 2, 1931.

A sycamore near Funkstown, measured by a representative of the State department of forestry, when reported June 1, 1928, had a circumference of 23 feet 3 inches, a height of 103 feet, and a branch spread of 100 feet.

The Liberty Tree on the campus of St. John's College, Annapolis, has a circumference of 32 feet 4 inches 2 feet from the ground and is 150 feet tall. The State department of forestry in 1928 reported this tree's circumference as 26 feet, its height as 124 feet, and its branch spread as 117 feet.

A black walnut near Chewsville measured by a representative of the State department of forestry and reported in 1928, had a circumference of 19 feet 7 inches, a height of 100 feet, and a branch spread of 132 feet.

A black willow (*Salix nigra*) near Chewsville was reported by the State department of forestry in 1928 as measuring 14½ feet in circumference, 61 feet in height, and 66 feet in branch spread.

A weeping willow (*Salix babylonica*) reported from near Thurmont is an exotic species native to western Asia, but naturalized in a number of localities from the Central Atlantic States westward to Michigan and Illinois. This tree, measured by the State department of forestry in 1928, had a circumference of 15⅓ feet, a height of 53 feet, and a branch spread of 79 feet.

An English yew, one of the trees on Mrs. W. J. Starr's estate near Easton is 8 feet in circumference and 41 feet tall and has a branch spread of 49 feet, as measured and reported by a representative of the State department of forestry in 1928.

MASSACHUSETTS

A white birch (possibly *Betula populifolia*) in Athol, Worcester County, is 12 feet 2 inches in its smallest circumference, according

to the report made by the American Genetic Association in connection with its 1915 tree contest (*6*, *54*).

The Rugg Elm, or Gates Elm, at Framingham (*83*, *excerpt; 84*, *pp. 8–12*), appears to be a rival of the Wethersfield Elm in size and age if not in reputation. (Compare with The Great Elm, at Wethersfield, Conn.) It has been said of the Rugg Elm: "If, indeed, it is a single tree and not two trees springing from a common root system, it is without doubt the largest elm to be found anywhere in New England." Records of its dimensions give its circumference as 25½ feet where the trunk divides and as 28½ to 30 feet at the base, its height as 70 feet, its branch spread as 145 feet, and its age as between 300 and 400 years.

Beeman Oak, Lancaster, a large red oak, has a circumference of 20 feet, a height of 75 feet, and a branch spread of 90 feet. (See Trees associated with the building of the Nation, p. 30.)

Waverley Oaks, along Beaver Branch, at Waverley (*10*, *v. 28*, *p. 551*), must have been sizable trees when the Norsemen and the Indians were rivals for the possession of this region. (See Trees associated particularly with writers and literature, pp. 48–49.)

At Concord, near the famous monument, there is a willow whose circumference is 22 feet at breast height, its height 43 feet, and its branch spread 63 feet, according to Simmons (*84*, *pp. 8–12*).

MINNESOTA

The largest white pine tree in nine States of the Central West, according to the News-Tribune, Duluth, stands near Pike Bay west of Cass Lake. It is 130 feet high and 14 feet in circumference, has a volume of 5,960 board feet, and is more than 400 years old. This tree was reported by E. L. Besley, executive assistant, Chippewa National Forest, (fig. 40.)

MISSISSIPPI

"A live oak grove of surpassing beauty, 10 miles west of Ocean Springs (*89*), is reported by Mrs. James R. Leavell, of Chicago, as on her place at Doonegate. Speaking of the Doonegate live oaks, President Stephens, of Southwestern Louisiana Institute, says:

> The splendid live oak groves, avenues, and individual trees to be found in and near Ocean Springs and Biloxi, Miss., are worthy of a place along with the best we have in Louisiana.

The Confederate Tree, a red oak which stands on North Lamar Street in Oxford, is claimed to be among the largest and oldest trees of its kind in the South. Its trunk is about 15 feet in circumference, and its branches shade an area approximately 600 square yards in extent. (See Trees associated with the building of the Nation, p. 31.)

MISSOURI

A soft maple at Warrensburg, with a circumference of a little over 13 feet at 3 feet from the ground, was reported by the American Genetic Association in September 1915 (*6*, *54*).

Big Oak (*Quercus macrocarpa*) in Mississippi County, 2 miles from the river, measured about 20 feet in circumference in 1932. This tree stands out among surrounding trees, mostly hickories, being noticeably taller, and its crown is thick and spreading. This

F–319177

FIGURE 40.—LARGEST REMAINING WHITE PINE TREE IN THE LAKE STATES REGION, NEAR PIKE BAY, LOOP ROAD, MINN. (COURTESY OF GEORGE W. KELLEY.)

tree was described by Woodbridge Metcalf, extension forester for California, in a report to the Forest Service, March 20, 1936.

A sassafras tree on the old Casey Farm, Laclede County, has a circumference of 15 feet 3 inches 6 feet above ground and is over 100 years old. This tree was reported by S. A. Casey of Lebanon, Mo., in a letter to the Forest Service dated October 22, 1931.

MONTANA

According to the report of Forest Ranger H. J. Thol, as of April 15, 1929, an Engelmann spruce (*Picea engelmannii*) on the Flathead National Forest, has a circumference of nearly 19 feet. Its top is broken off at about 80 feet.

Another Engelmann spruce on the Flathead has a circumference of nearly 19 feet and an estimated height of 200 feet. This tree also was reported by Forest Ranger H. J. Thol, as of April 15, 1929.

NEBRASKA

A cottonwood at Milford, with a circumference of 36 feet 5 feet from the ground, a height of 128 feet, and a spread of 78 feet, was reported by the American Genetic Association in 1915 (*6*, *54*).

NEW JERSEY

The white oak in the Friends' Cemetery, at Salem (fig. 41), (*7*; *9*; *23; 35; 57; 69a; 71*, *p. 14*) has a circumference of 19½ feet and a branch spread of 117 feet. It is nearly 90 feet tall. One estimate places its probable age at 300 years, another at 350 to 400 years. (See Trees associated with religion, pp. 52–53.)

F—349620

FIGURE 41.—SALEM'S FAMOUS WHITE OAK TREE AND TABLET ERECTED IN ITS HONOR.

Tatum Oak (white oak), at Mantua Grove, about 4 miles from Woodbury, has a circumference of 25½ feet at 4 feet above ground, above all enlargement caused by roots. It is 94 feet tall and has a branch spread of 121 feet. Its estimated age is about 1,000 years. This information is contained in letters from John A. Whitall, president of the Gloucester County Historical Society, New Jersey, to the Forest Service, dated August 22, 1916, and January 10, 1917. Also Alfred Gaskill, then State forester, is quoted as claiming that this is the largest white oak tree east of the Alleghenies.

The same letters report a white oak at Mantua (*6*, *54*) on a knoll on the bank about 3 miles farther up the creek than Tatum Oak, which has a circumference of 20 feet 1 inch 4 feet from the ground. The spread of its branches is given as 118 feet.

A sassafras at Madison has been reported by the owner, Henry Hentz, as having a circumference of 12¼ feet 6½ feet above the ground, a height of 75 feet, and a branch spread of 50½ feet. Correspondence and photograph in files of the Forest Service.

A black walnut on Hanover Neck with a circumference of 24 feet has been listed among the largest individual hardwood trees by Lamb (*6*, *54*).

NEW YORK

New York is represented in this hall of fame by three notable elms: The Gowanda, the Elm of Italy Hollow, and the Markham Elm. The Gowanda Elm, "New York's Greatest Tree," has a circumference of more than 30 feet. Simmons (*85*, *pp. 9–12*), says:

> The Gowanda Elm is 39 feet in circumference near the ground, and is without limbs to 50 feet from the ground, at which height its girth is 20 feet. The tree is 100 feet tall and contains 17,000 board feet of lumber, sufficient to make 1,800 barrels.

Records submitted in a contest for the largest tree in New York, organized by the State College of Forestry at Syracuse and the New York State Forestry Association, in 1921, gave this tree the prize as having a circumference of 34 feet 2 inches.

Elm of Italy Hollow, near the town of Middlesex, carried off the prize in a big-tree contest sponsored in New York State in 1920 by the State College of Agriculture. Its circumference is given as 32 feet and it shades an area of 8,650 square feet. (See Trees associated with the building of the Nation, p. 33.)

A giant elm, whose long life has almost run its course, is the Markham Elm (*71*, *pp. 42–43*) on the estate of that name 2 miles north of Avon. The circumference of the trunk has measured 40 feet, but it is much decayed and as far back as 1893 a part of the huge tree blew down, making it possible to saw a section across and count the annual rings, which showed that the tree was then about 600 years old. (See Trees associated with the building of the Nation, p. 33.)

At the home of Ellis Parker Butler, at Flushing, Long Island (*65*) there is a white oak with a circumference of 17 feet. It is only 54 feet tall and has a branch spread of 90 feet. Its real claim to distinction is its age, estimated by the botanist, Asa Gray, as 600 years. Since Gray died in 1888, his estimate of the tree's age must be increased by about 50 years.

A red oak at Lloyds Neck, on the north shore of Long Island (*10, v. 28*) has been claimed by Dr. Britton, of the New York Botanical Garden, to be the largest and finest specimen of red oak in the East. It has a circumference of 16 feet 8 inches at 3 feet from the ground and a branch spread of 150 feet. It is thought to be more than 400 years old.

Lafayette or Geneva Century Balsam Poplar, on Hamilton Street, Route 20, just west of Geneva, is already listed (p. 10). According to G. B. Sudworth, dendrologist of the Forest Service, measurements taken June 7, 1925, show that the tree was then 95 feet tall, with a branch spread of 110 feet and a circumference of 22 feet 2 inches 5½ feet from the ground. (See Trees associated with notable people—Lafayette Trees, p. 10.)

Balmville, which is within a few miles of Newburgh, obtained its name from a huge poplar or balm-of-Gilead tree, measurements of which have been taken at intervals since 1782. According to latest measurements it has a circumference of 21 feet 8 inches, 2 feet from the ground (*71, p. 29; 85*).

Inwood Tuliptree, at the eastern base of Inwood Hill, at the northern end of Manhattan Island, at the mouth of Harlem River, is said to be "the only living thing on Manhattan Island which was there when Henry Hudson came." This tree has a circumference of 19 feet and is 123 feet tall (See Trees associated with the building of the Nation, p. 35.)

Wayne Black Walnut, or Black Walnut of Stony Point, near the town of Stony Point, has a circumference of 21 feet at 4 feet from the ground and is 80 feet tall. (See Trees intimately associated with other famous people, p. 13.)

NORTH CAROLINA

A chestnut tree on the main range of the Great Smoky Mountains, 3 miles from Crestmont, was entered in the tree contest of the American Genetic Association in 1915. This tree then had a circumference of 33 feet 4 inches 7 feet from the ground and a height of 75 feet. It was then said of it that "after the San Benito Oak of California, this is the largest nut-bearing tree submitted" in the contest (*6, 54*). (It is possible that this tree has been killed by the blight.)

McLaughlin White Oak at Statesville (*63*), has a circumference of 30 feet just above the ground and a branch spread of about 108 feet.

The South's Living Christmas Tree, a magnificent live oak in Hilton Park, Wilmington, under whose spreading branches the community Christmas festivities are held.

This unique Christmas tree is said to be between 200 and 300 years old. The spread of its branches is about 110 feet, the circumference of its trunk is approximately 15 feet and its height is 75 feet. It is claimed that it would take three 2-ton trucks to carry away the moss on the Wilmington Christmas tree (*42*).

A pine in Coaky swamp, Edgecombe County, has a circumference of 31 feet and is 175 feet tall. It has been claimed for it that it is "the biggest tree in North Carolina," but this claim should be compared with that of the Crestmont chestnut, North Carolina (*1*).

The tallest tree entered in the American Genetic Association contest of 1915 was a tuliptree on Reems Creek, not far from Craggy Mountain, about 15 miles from Asheville. This tree was credited with a circumference of 34½ feet 4 feet above ground and was 198 feet tall (*6*, *54*). The Department of Agriculture (*61*) found that this tree had a breast-high circumference of 28.7 feet and a height of 144 feet to a broken top when measured in 1932. According to a report from C. A. Abell, assistant silviculturist, Appalachian Forest Experiment Station, Asheville, of August 23, 1935, this yellow poplar was burned down by unknown persons on April 15, 1935. Apparently the fire had been started inside the hollow base. Newspaper reports of the burning of the Reems Creek tree said that a group of "Harvard scientists" had once estimated the age at more than 1,000 years.

On Cane River, near Blue Sea Falls, there stands a tuliptree with circumference at breast height on the contour of 25.3 and a total height of 132 feet. The top of this tree has been broken off for some time. From the size of the stub at the top, it seems probable that the Cane River tree was 200 feet high at one time and taller than the Reems Creek tuliptree. This tree was reported by C. A. Abell, assistant silviculturist, Appalachian Forest Experiment Station.

OHIO

Rathbone Elm at Marietta (*6*, *10*, *v. 26*, *pp. 236–237*) has a circumference of 27 feet 3½ feet from the ground. It is believed to be nearly 700 years old. (Compare with the Logan Elm, Trees associated with the building of the Nation, p. 37.)

A monster cucumbertree (*Magnolia acuminata*) is in Gale Woods, Morrow County. Its circumference, 9 feet, is not unusual, but it is about twice as tall as the average.

A soft maple in Salem, with a circumference of 11½ feet 4 feet above ground and a height of 73½ feet, was reported by the American Genetic Association in September 1915 (*6*, *54*).

A sassafras near the Ohio River, on a farm 8 miles east of Marietta, has a circumference of 13 feet 11 inches 1 foot from the ground but above the roots. Its trunk height is 32 feet, the top of the tree having been blown off. The top of the present highest branch is about 55 feet. This tree was reported by Charles L. McCollum, of Marietta, to the National Geographic Society in a letter dated March 4, 1926, and the letter was referred to the dendrologist of the Forest Service.

OKLAHOMA

A bald cypress 1½ miles west of Eagletown, McCurtain County, has been called the "biggest tree in Oklahoma." It has a circumference of nearly 50 feet and a height of 100 feet. This grand old cypress stands on the land that was the former seat of government of the Choctaw Nation (*17*, *v. 33*, *p. 544*) (fig. 42).

A cottonwood near Aline, more than 30 feet in circumference, was said to be the largest tree of any kind growing in Oklahoma, but since that claim was made the record of the Eagletown bald cypress has appeared to outrival it (*1*).

OREGON

A black cottonwood (*Populus trichocarpa*) 2 miles southeast of Corvallis 25 feet in circumference above the main base swell and

F–321105

FIGURE 42.—THE BIGGEST TREE IN OKLAHOMA, A BALD CYPRESS, NEAR EAGLETOWN, MCCURTAIN COUNTY. (COURTESY OF AMERICAN FORESTS.)

125 feet tall, is "believed to be the largest angiosperm in the West" (*87*), but compare it with the six California oaks listed.

There is a Douglas fir near Pawn, on the Siuslaw National Forest, which is 295 feet high (*60*).

A white fir with a circumference of about 11½ feet, and a height of 133 feet, in Klamath County, is reported in bigtree statistics compiled

by Ernest L. Kolbe, junior forester, Pacific Northwest Forest Experiment Station.

The same list contains a mountain hemlock (*Tsuga mertensiana*) of unusual size in Crater Lake Park. Its circumference is given as 16.6 feet and its height as 156 feet.

Summer Lake has a western juniper (*Juniperus occidentalis*) nearly 12 feet in circumference and 35 feet high, according to Ernest L. Kolbe, junior forester, Pacific Northwest Forest Experiment Station.

The Pioneer Walnut, at Salem, is a California black walnut that was planted at Salem in the pioneer days of the Oregon country. According to the measurements of C. A. Reed of the Department of Agriculture, this tree has a circumference of 10 feet 11 inches about 6 feet from the ground. Several tons of nuts are harvested from it every year (*10, v. 28, p. 553*).

PENNSYLVANIA

An American chestnut tree on a farm near Spinnerstown, Bucks County, was reported (*32*) as having a circumference of 33 feet 2 feet from the ground and a height of nearly 90 feet and being 220 years old. It was said then to be the largest chestnut tree in Pennsylvania. (Since most chestnut trees in this section have succumbed to the chestnut blight in recent years, this one may be dead now.)

The Washington Horsechestnut, one of the largest horsechestnut trees in North America, may be found on the property of the Bath & Portland Cement Co., near Bath, Northampton County. It measures 17 feet in circumference 6 feet from the ground (*45, ed. 2*). (See Trees associated with notable people, p. 4.)

A bur oak at Huntington (*45, ed. 1*), is 29 feet in circumference 1 foot from the ground.

A swamp white oak at Bedford (*45, ed. 1*), has a circumference of 27½ feet. It was entered in a State bigtree contest in 1925.

A white oak at Kutztown, Berks County (*10, v. 28, pp. 551–553*), has a circumference of 31 feet at the ground. It is believed to be the largest white oak in Pennsylvania.

Sacred Oak of the Delaware Indians of Oley Valley, Berks County, a few miles northeast of Reading, is a chestnut oak 22 feet in circumference, with a branch spread of 116 feet. (See Trees that have had special protection, p. 58 and fig. 28.)

A white pine cut near the mouth of Cedar Run, Lycoming County, had a circumference of more than 37 feet, was 200 feet tall, and had a volume of 6,500 board feet below the branches.[6]

A white pine south of Aaronsburg, Center County, has a circumference of only 10½ feet and is 140 feet high. It is, however, of venerable age—235 years (*44*).

A sassafras in a quaint old graveyard directly opposite the Friends' meeting house, Horsham, has a circumference of 16 feet at 5 feet from the ground. The top is broken off, leaving only 19 feet of the trunk standing. Before its decline, the tree was estimated to be over 100 feet tall. It is of venerable age also. (See Trees associated with religion, p. 55.)

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[6] PENNSYLVANIA DEPARTMENT OF FORESTS AND WATERS. MAMMOTH WHITE PINE. Pa. Dept. Forests and Waters. Serv. Letter, ser. 2 (402) : 4. [Mimeographed.]

Chipman Sassafras, at Dunwandrin, estate of the late Frank L. Chipman, 4 miles west of Easton, Northampton County, has a circumference of nearly 14 feet 18 feet from the ground. It is almost 100 feet high. It lost its crown in 1933. Although its exact age is not known, it is believed to have lived through the entire history of the United States (*72*)

John Goodway Sycamore, 2 miles west of Linglestown, Dauphin County, is a remarkably large and sound tree for one of such size and age. It is named for the last of the friendly Indians in the district about Harrisburg. It has a circumference (May 17, 1937) of 21 feet at breast height and a branch spread of 105 by 120 feet. (*71, p. 37* and fig. 8.)

A sycamore on the bank of Neshaminy Creek about 15 miles north of Philadelphia, was reported in a letter from John G. Whitall, Woodbury, N. J., dated January 10, 1917, to the Forest Service. The only measurement given was a circumference of 34 feet, but, according to the writer, it was "claimed to be the largest tree east of the Allegheny Mountains." (Compare with the Longwood (Fla.) cypress and the Coaky swamp (Edgecombe County, N. C.) pine.)

A sycamore 4 miles west of Lancaster, and between Lincoln Highway and Marietta Pike, has a circumference of 22 feet 5 feet above ground, a height of 102 feet, and a branch spread of 118 feet east to west and 138 feet north to south. It is believed to be more than 200 years old (*45, ed. 1*).

Fort Hunter buttonwood. (See Trees associated with the building of the Nation, p. 39 and fig. 21.)

SOUTH CAROLINA

Angel Oak, Johns Island. This oak has a height of 160 feet. The longest branch is 76 feet long. The circumference of the trunk is 21 feet.

Middleton Oak, an outstanding live oak, the genius of the estate, at Middleton Gardens on the Ashley River, about 17 miles north of Charleston (*78*). Experts have variously estimated the age of this oak as being anywhere from five to seven centuries, and yet gloriously sturdy and healthy it stands, braving storms and renewing its youth each recurring spring, freshening its mantle with tender green. The branches form almost a perfect circle, giving a shade span at noon of 180 feet. Its trunk measures 35 feet in circumference, 5 feet above the ground.

What is known as the Spy Oak at Hillcrest, near Stateburg, has a circumference of a little more than 28 feet, and it is more than 400 years old. (See Trees associated with the building of the Nation, p. 40.)

TENNESSEE

In Washington County is the Daniel Boone "Bar Tree," a beech reported in 1915 to be 350 years old (*67*). It then had a circumference, breast high, of 7½ feet and was 85 feet tall. (See Trees associated with the building of the Nation, p. 40.)

The Kingsport Elm (*11, v. 36; 64, 71, p. 46*), that "veteran giant of Kingsport, Sullivan County, Tenn.," has a circumference of 24½ feet and a height of 150 feet. It is believed to be between 400 and 500 years old.

TEXAS

Bishop Live Oak (*91; 92, p. 20*), near Rockport in Aransas County, is reported by Burtt Potter as worthy of comparison with the best in Louisiana. It is credited with a circumference of 25 feet 6 inches 4 feet above the ground. It ranks eleventh in a list of notable live oaks reported by President Stephens of Southwestern Louisiana Institute, the 10 that are larger ranging from 35 to 27 feet, all of them in Louisiana.

Jumbo, a pecan tree in San Saba, near the Colorado River, which is a claimant to the title "largest pecan in the world," is 120 feet high, with a clear length of 41 feet to its first limb. This pecan has a much larger bole than the Hohen Solms pecan in Louisiana, but in circumference the latter excels, according to C. A. Reed, associate pomologist, Bureau of Plant Industry. The spread of the main branches of Jumbo is 100 feet. It is said of this veteran that "a thousand years ago it was a hardy sapling" (*76*).

UTAH

A notable white fir (*Abies concolor*), pronounced by an ecologist "the most magnificient fir in the world," is on Timpanogos Mountain. It has a circumference of 17 feet 8 inches and is 110 feet tall (*30*). This is a specimen of unusual size for the interior of the continent. On the California Sierras it attains much greater size, but no individuals have been reported from there.

What is believed to be the oldest juniper tree in the world is being protected by the Forest Service, according to reports received from the Cache National Forest, in northern Utah, near the main Logan Canyon Highway. A careful examination of this tree made by scientists from the Utah State Agricultural College and Forest Supervisor Carl B. Arentson showed the age of the tree to be not less than 3,000 years, thus putting this tree in the age class of the redwoods of California. The circumference breast high is 23½ feet, and the height is 42 feet (*12, 56, 97*, fig. 43.)

VERMONT

Veteran rock maple in Vermont's oldest sugar maple orchard, Pine Grove Farm, on Putney Road, one-third of a mile west of the Connecticut River (*14, p. 481*). The tree's base shows the knotted, uneven growth covering scars made by the old boxing method by which the tree was made to yield its annual crop of sap before tapping bits came into general use (fig. 44).

VIRGINIA

An arbovitae (northern white cedar) at Natural Bridge, 15 feet in circumference, 90 feet tall, and with a branch spread of 33 feet, is probably the oldest tree in the East, with the exception of the Florida cypresses (*58, p. 11*).

A water oak at Toddsbury (*58, p. 20*), one of the oldest estates in Gloucester County, has a circumference of 26 feet and a branch spread of 120 feet. Apparently it was a tree of goodly size when Toddsbury was established in 1658.

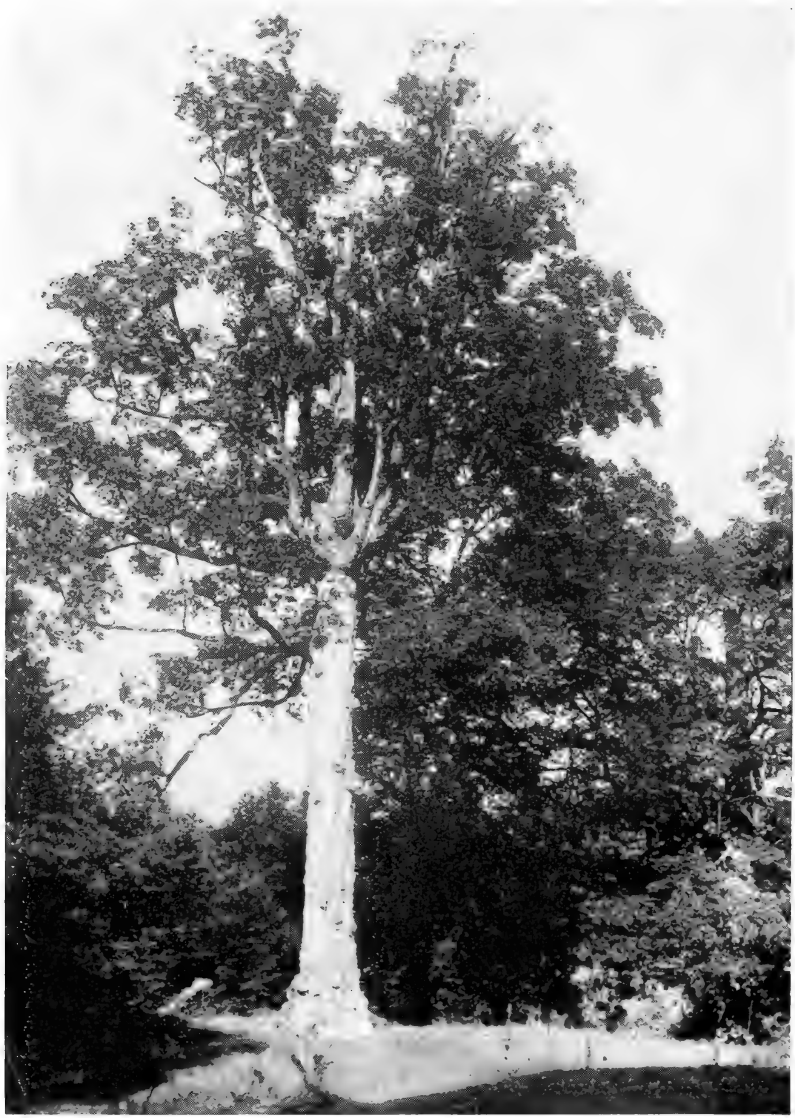
F—190203

FIGURE 43.—OLD UTAH, AGED JUNIPER NEAR LOGAN CANYON HIGHWAY, CACHE NATIONAL FOREST, UTAH.

An oak on Willoughby Bay (*58, p. 11*), at the summer home of J. A. Ridgeville, has a circumference of 19 feet and a spread of 57 feet. Its distinction is its great age, which is estimated to be between 500 and 600 years.

Live oaks at Fort Monroe, near the reviewing stand on the parade ground (*58, p. 19*) are among the northernmost live oaks to be found in the United States. There is every evidence that these oaks were here when the first settlers arrived in Virginia.

A pecan tree at Brandon-on-the-James, is between 10 and 11 feet in trunk diameter, which means that it has a circumference between 31 and 34 feet. This tree is believed to have been well established when the house was built in 1770 (*58, p. 14*).



F-321107

FIGURE 44.—VETERAN ROCK MAPLE, SOLE SURVIVOR OF VERMONT'S OLDEST SUGAR ORCHARD, PINE GROVE FARM, VT. (COURTESY OF AMERICAN FORESTRY ASSOCIATION.)

A sassafras on a farm near Keswick has a circumference of 18 feet 4 inches, 5 feet from the ground, and is probably the largest sassafras in the country. According to Lay (*8*)—

> some years back this tree was a hollow trunk, broken off at the top and languishing. Someone built a fire in the interior which was quenched with difficulty. It was thought that the fire would finish the tree. Instead, it killed the bugs and hardened the interior surface and the old tree stump branched out, like a dressy old woman, in a new Easter bonnet, with a crown of strong healthy boughs.

Martha Custis Yew, an English yew, at Williamsburg. This famous tree has a circumference of 14 feet at its base, and its branch spread is 35 feet in diameter. (See Trees intimately associated with other famous people, p. 16.)

WASHINGTON

Statistics compiled by Ernest L. Kolbe, junior forester, Pacific Northwest Forest Experiment Station, include several western red cedars (*Thuja plicata*), the most notable of which is one at North Bend, with a circumference of about 58 feet and a height of 200 feet. He reports a smaller western red cedar on the Snoqualmie National Forest as more than 1,100 years old.

A giant arborvitae (western red cedar) in Snohomish County (fig. 45) is so large that a path has been cut through the trunk. The trunk has a circumference of 39 feet 9 inches (*10, v. 27, p. 313*).

According to C. R. Clark, former forest examiner, Kaniksu National Forest, there is a giant arborvitae on that forest measuring 36 feet in circumference and estimated to be 2,000 years old.

The largest Douglas fir of which there is an accurate record stood, until recently, in a grove of giant cedars and firs near Mineral (*60, 74, 88*). This tree, measured in 1924 by a Pacific Northwest Forest Experiment Station expert, had a circumference of more than 48 feet and a height of 225 feet to a broken top. It was estimated to be more than a thousand years old (fig. 46.) It was blown down in a severe wind storm in 1930.

Another Douglas fir, near Little Rock, was reported in 1900 (*60*). Its circumference was given as 18.8 feet, which is not remarkable, but its height was 330 feet, which gained it a reputation as "the tallest Douglas fir on record."

Other Douglas firs in Washington notable for great height include one near Hoquiam, 318 feet high; a second near Little Rock, 310 feet high; and a third, near Darrington, 325 feet high (*60.*)

The oldest Douglas fir of which there is any authentic record was found in 1913 by Ranger Hilligoss on the Finney Creek watershed about 30 miles east of Mount Vernon. The age count was made on a section about 40 feet above the stump, and the age at that point was 1,375 years. Since at least 25 years were required to reach the height at which the age count was made, this tree must have been over 1,400 years old when cut (*88*). The next oldest is the tree at Mineral. There may be taller, older, or larger trees than these Douglas firs, but the Forest Service has no record of accurately measured trees which surpass those described.

The statistics compiled by Ernest L. Kolbe, junior forester, Pacific Northwest Forest Experiment Station, include Douglas firs at Mineral, Little Rock, Hoquiam, and Mount Vernon; and in addition, one at Ryderwood, circumference 36 feet and height 303 feet; another at Lebam Mill, circumference 31.4 feet and height 225 feet; and several others with circumferences of less than 30 feet.

Statistics for the North Pacific Forest Region in volume-study data of the Pacific Northwest Forest Experiment Station, compiled by Ernest L. Kolbe, junior forester, include three western hemlocks

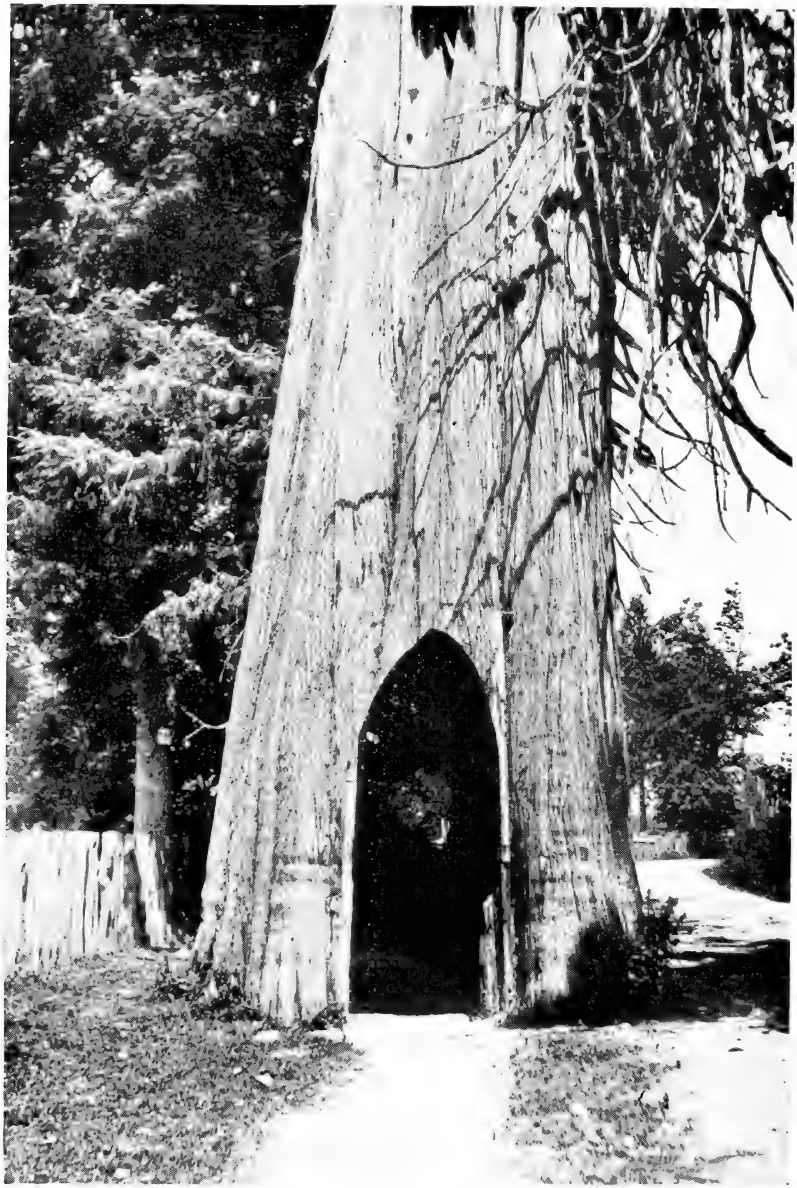


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FIGURE 45.—GIANT ARBORVITAE (WESTERN RED CEDAR) IN SNOHOMISH COUNTY, WASH

(*Tsuga heterophylla*) 210, 254, and 259 feet tall, though not of unusual circumference, in the vicinity of Cathlamet.

Columbia Forest Methusaleh. This is a ponderosa (western yellow) pine believed to be the biggest yellow pine in the State of Washington and the oldest living thing within the Columbia National Forest. It is 4 miles north of Trout Lake on the road that leads to

F--305146

FIGURE 46.—LARGEST DOUGLAS FIR TREE, NEAR MINERAL, WASH. (COURTESY OF T. J. STARKER AND AMERICAN FORESTRY ASSOCIATION.)

Bird Creek Meadows. At breast height it has a circumference of 23 feet. It would take four men, each with arms outstretched and touching hands, to encircle the tree. Experts estimate its age at 450 years. This tree was reported by E. P. Cecil, forest supervisor.

A Sitka spruce near Soleduck River, on the Olympic National Forest, has a circumference of 50 feet and a reputation at the time it was measured for being "the largest living spruce yet reported" in the North Pacific Region. Its top is broken off 150 feet from the ground. This tree was reported August 4, 1919, by Forest Assistant N. L. Carey, after a field trip connected with a Sitka spruce study.

A later field report, part of a similar study, the results of which have been published by the Department of Agriculture (*28*), tells of a Sitka spruce in the vicinity of Quinault Lake, with a circumference of 50 feet and a height variously estimated at 282, 285, and 296 feet.

Large Sitka spruce trees on the Olympic National Forest were reported from the regional office in a letter dated September 19, 1916, giving measurements taken by Forest Examiner Hanzlik at Walker Brothers operation, about 3 miles from Humptulips, in July 1914. The three trees measured as follows: Height, 273 feet, and circumference (breast high), 25 feet; height 269 feet, and circumference (breast high), 29 feet; height, 243 feet, and circumference (breast high), 28 feet.

Statistics compiled by Ernest L. Kolbe, junior Forester, Pacific Northwest Forest Experiment Station, include the Soleduck River and the Humptulips Sitka spruces and others of notable size, among them three, respectively, 279, 282, and 285 feet tall, which are located in T. 29 N., R. 11 W., in the Olympic National Forest, near the northern boundary.

A western yew (*Taxus brevifolia*) on the Hamma Hamma watershed, Olympic National Forest, with a breast-height circumference of over 9 feet, is reported by Floyd L. Otter, instructor in the School of Forestry of University of Idaho, Moscow, Idaho.

WEST VIRGINIA

Mingo White Oak (*38*) near the head of Trace Fork of Pigeon Creek in Mingo County, 10 miles south of Logan, is believed to be the largest white oak in the United States. The age of this mountain patriarch is estimated to be 577 years, and it is 145 feet tall. In February 1932 Perkins Coville, of the Office of Silvics, Forest Service, commenting on a report of the characteristics of the Mingo White Oak, estimated that its circumference at the ground was 30 feet, its over-all height 135 to 165 feet, and its volume 20,000 board feet. (Death of this tree was reported by the State forester, May 4, 1938.)

WISCONSIN

A silver maple on the west bank of the Menominee River, near soldiers' home grounds, in the vicinity of Milwaukee, has a circumference of nearly 22 feet 1 foot from the ground and an estimated height of 70 feet. It has been said of it that it is "probably the largest tree in the vicinity of Milwaukee" (*27*).

Twin white pines in the Nicolet National Forest (fig. 47), are reported by Forest Supervisor Warren T. Murphy, who states that these

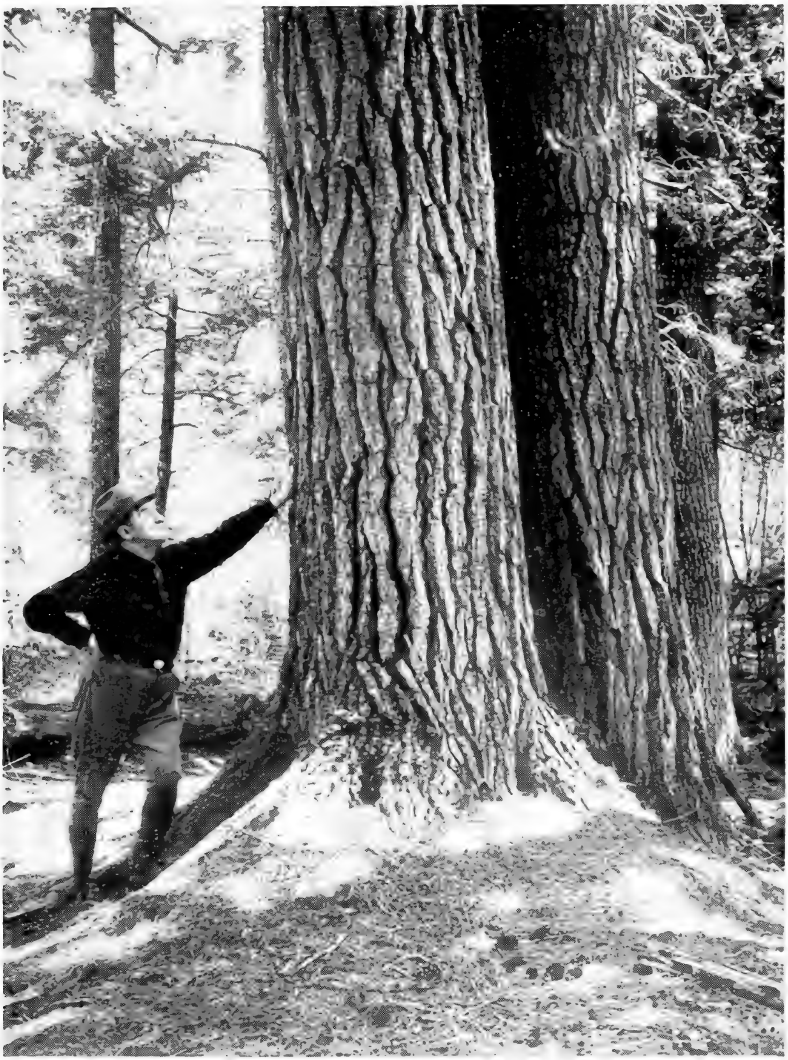

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FIGURE 47.—TWIN WHITE PINES, NICOLET NATIONAL FOREST, WIS. (COURTESY OF TORKEL KORLING.)

giant individuals in a stand of virgin timber contain at least 7,200 board feet of lumber. According to him, one of the trees measures 12½ feet in circumference and the other 11½ feet.

OUTSTANDING FOREIGN RIVALS

Many countries have trees notable for great size or age.

Because of lack of space and often of accurate record, foreign trees cannot be included in this list. However, there is one great tree which is in such close competition in age, if not also in size, with our

sequoias, that it should be included, if only by way of comparison (*86*, *93*).

The Cypress of Tule (*Taxodium mucronatum*), in the Indian village of Santa Maria del Tule, a few miles east of the city of Oaxaca, Mexico, is, in the opinion of Herman Von Schrenck, consulting timber engineer of St. Louis, Mo., not less than 4,000 years old. According to Dr. Von Schrenck (*21*) the Tule tree is 140 feet high, and 24 men can barely span it with their arms, its circumference 40 inches from the ground being about 117 feet. He says:

> But the true circumference is hard to measure because of the great unevenness of the trunk, which is far from being a true cylinder. This unevenness has caused many persons to believe that this tree is really three trunks grown together instead of one. But most botanists who have viewed it, admitting that this cypress can thus fuse its trunks and even its branches, say that the Tule tree is really a single trunk and that such unevenness is a characteristic of the species.

Glassman (*36*) journalist on newspapers of Cincinnati, Washington, Louisville, and New York, said of the Cypress of Tule after a special personal study:

> Following the sinuosities of El Tule's gigantic trunk, one measures its perimeter as 108 feet at a height of 5 feet above ground. So far as known, no organism ever attained such a vast girth. But El Tule's girth is out of all proportion to its height of 141 feet, which is surpassed by trees in more temperate climates.

In the most recent report on this tree giant, Shamel (*79*), of the Department of Agriculture, gives, as his own measurements taken on October 4, 1936: Circumference, 113 feet 4 inches; diameter 36 feet 1 inch; and height, 118 feet 7 inches. He says that "while this tree has about the same diameter as the General Sherman sequoia, it is not nearly so tall," and that "its age is estimated variously at from 4,000 to 10,000 years."

Reports have been made of Australian trees 400 and even 500 feet tall, but the tallest eucalyptus now standing is a giant gum (*Eucalyptus regnans*) in Victoria, which is 325 tall (*55*).

FREAK TREES

Strange misadventures sometimes befall trees. Weather, particularly wind, is one of their adversaries. Various human, plant, and animal agencies also make living difficult for many trees.

Freak trees are interesting not only as curiosities but also as illustrating a remarkable capacity for adaptation. A thrifty tree may have grown in an unnatural environment—out of its element, as it were—or have overcome some serious handicap. There is both surprise and satisfaction in the study of the way in which it has dealt with its difficulties.

Thus, the tree with roots embracing stone or ironwork, growing from an old stump or in the crevice of a rock, the Siamese twin trees, G-trees, multiple trees, the prayer-book pine tree and others listed have special interest for students of nature.

CALIFORNIA

"A maple tree on a redwood grows," at Scotia. This curiosity of the tree world is admired by all tourists who pass along the Redwood

Highway, which runs from San Francisco to Crescent City. When the highway was being built, the president of the Pacific Lumber Co., at Scotia, would not permit the destruction of this unique landmark, and the sidewalk was swerved to preserve it.

Multiple tree—freak pine growth. A yellow pine on the Plumas National Forest is really four complete trees growing from the same stump. The sapling was undoubtedly bent and broken by heavy snows, and certain of the branches on the upper side grew upward. Where the sapling touched the ground, another branch started skyward.

Prayer-book pine tree, Blochman Ranch in Cathey Valley, Mariposa County. In 1924 a small scar near the base of the tree attracted the attention of a student of the University of California. A few probes of a knife blade brought to light tiny bits of paper. By means of a sharp ax which cut through several inches of new growth, a small leather-covered Bible or prayer book was disclosed. In growing over the wound, the tree had completely covered the volume with a coat of pitch, so that the leather was still somewhat flexible. The paper was found in good condition and the print legible, but because of the pressure on the top and bottom of the book, it is impossible to turn the pages. This is a splendid example of the prowess of tree growth in closing a wound. Ring counts have not been made on the cut, but it seems likely that the tree had the little volume in its keeping for more than half a century.

CONNECTICUT

A magnificent old elm stands on the property of Rutherford Pratt at Hamburg. It has grown around a gravestone bearing the name Jasper Gray and the date 1782. As a sapling the tree was evidently planted at or near the head of the grave.

About a mile below Winchester, a maple tree 8 or 10 feet in circumference has grown upon a split rock apparently drawing its sustenance up through the cleft.

A hollow oak, said to be the oldest tree in Derby, stands at the southwestern end of the Colonial Cemetery there. In the hollow of the trunk are two old gravestones.

DISTRICT OF COLUMBIA

An alianthus embracing an iron fence grows in front of 616 Sixth Street, NW. This tree of heaven has grown around an upright as well as the horizontal frame of the fence.

FLORIDA

Nature's symbol of the "Gator State." The root of a banyan tree has taken the form of an alligator at Fort Lauderdale.

Live Oak with roots exposed so that the tree appears to be growing on a table of its own manufacture in the Ocala National Forest (fig. 48).

GEORGIA

Double pine grows on Pine Mountain in Harris County near Columbus. This is a longleaf pine, starting as two trees 6 feet apart

at the ground, crossed but not joined 7 feet from the root. At a height of 30 feet the two trees are joined together, forming one complete tree.

ILLINOIS

Near Norris City is the Vaulting-Pole Cottonwood. In the spring of 1815, two boys returning from a log rolling on a farm near Norris City, made a wager as to who could vault the farther, using their cottonwood handspikes as vaulting poles. They left their handspikes in the soft earth, and during the spring rains of 1815 the handspikes both took root and lived. One has since died, but the other, when last reported, had passed the century in age and had grown to more than 30 feet in circumference and 175 feet in height.

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FIGURE 48.—LIVE OAK ON A "TABLE" BUILT OF ITS OWN ROOTS. OCALA NATIONAL FOREST, FLA.

INDIANA

A remarkable example of tree adaptation is reported from Greensburg. On the courthouse tower there is thriftily growing a largetooth aspen which is about 20 years old. Several other trees have grown on this tower, which is built of blocks of limestone. Seemingly the trees draw their nourishment from the mortar between the stones. There is no way to get to the tree except by a scaffolding or by employing a steeple jack. Therefore the belief that Greensburgers have some secret way of watering it is clearly in error. It is sustained by the sun and the rain and the persistence of its root system.

Naturally grafted beech trees are to be found 4½ miles south of Salem. These two trees were united when first discovered nearly 100 years ago. The connecting limb is about 20 feet from the ground

and was at that height when the joining took place. The common branch did not originate in both trunks. It sprang from one and, after pressing against the other for a time, grew fast to it by a process of grafting.

Wayward White Oak grows near Laporte. This tree is 9 feet in circumference at the base. Fifteen feet from the ground the bole divides into a number of limbs. Two limbs leave the trunk about 20 inches apart, and 12 feet from the body of the tree unite again, forming a perfect oval. Six feet from the base, another white oak less than half the size of the Wayward Oak, meeting one of its circle of branching limbs, grows into it and is absorbed.

A paulownia tree 2 feet in diameter at Rockport, was dehorned at 18 feet above ground 11 years ago, having grown unsightly. A seed of the tree lodged in the top of the stump, germinated, and sent a root down the trunk of its parent to the ground. It has since split the old trunk from a few inches to nearly a foot (fig. 49).

IOWA

"A tree that is committing suicide," Cedar Falls, The roots completely encircle the tree at its base and are gradually choking it to death.

Twin Elms are found in Iowa County in the Iowa River bottom timber. They stand 7 feet apart at the base and 30 feet above the ground unite, forming a common trunk 3 feet in diameter for at least 10 feet. In total height and spread of branches, this tree is comparable with normal elms.

KANSAS

"The tree that would not die" is a bald cypress on the campus of Saint Benedict's College at Atchison. Father Boniface—Kansas pioneer, monk, educator, and naturalist—when a young man, planted a little cypress halfway down the slope of a deep ravine on the then new campus. The growth of St. Benedict's and the necessity for filling in the ravine twice buried more than half of the cypress in the new-made land. To see this tall, healthy, well-shaped tree standing by the monastery wall now, one would never suspect that its trunk runs downward through the earth 30 feet or more.

Near Chandler there is a live grapevine growing through the solid trunk of an oak. The swaying of the tree and vine has kept a loose hole worn through the living tree. The grapevine is more than an inch in diameter, reaches the top branches of the tree, and bears luscious fruit.

The Windmill Tree is on the road to Maplehill, just a few miles west of Topeka. The silhouette of this cottonwood bears a marked resemblance to a Dutch windmill.

KENTUCKY

A unique illustration of the adaptability of plant life to unusual conditions in environment is found in the base of a sycamore tree growing at right angles from a bridge pier near LaGrange (*33*). According to the story:

> Shortly after the tree reached a diameter of an inch, either the shearing effect of gravitation or the upward swing in heavy winds would have snapped

FIGURE 49.—A PAULOWNIA TREE HOUSING A HUSKY OFFSPRING, ROCKPORT, IND.
(COURTESY OF C. A. REED, BUREAU OF PLANT INDUSTRY.)

it off close to the pier. The tree spread out a broad base, forming a truss with a compression member to overcome downward and lateral pulls. It also sent roots upward through the vertical seams between the masonry, thus forming the tension members of a truss. It is doubtful whether any tree rooted in the soil is more effectively anchored against all the stresses and strains the elements can exert.

MAINE

O Elm near Fryeburg is so named because of a twisting branch which forms an almost perfect O.

MARYLAND

An oak with a gold ring in its heart. While workmen were cutting railroad ties near Willoughby, Queen Annes County, they discovered a gold ring in the heart of an oak tree. It is supposed that the ring had been lost in the woods many years before it was found in its strange hiding place and that when the tree was the sprout of an acorn the ring became encircled around it.

MASSACHUSETTS

Wishing Elm is near the State highway in Bridgewater. This tree was formed by the binding and growing together of four saplings, giving the appearance of a single tree on stilts. It is known as "the wishing tree" because small boys and girls of the locality believe that if one walks in and out among the four legs of the trunk while making a wish the wish will come true.

A 4-foot tree 120 feet high in downtown Boston. High up on Tremont Temple, rooted in a tiny crevice, is a small tree which can be seen from the street. It has been growing several years, and clings so tenaciously to its airy perch that attempts to pull it out have been unsuccessful. It is believed that the seed from which it grew was carried to the crevice by a pigeon. (From Fancy This, No. 137, Boston Herald, May 25, 1935.)

MICHIGAN

The Mill Wheel Tree grows near Owosso. More than a hundred years ago, a mill wheel was left standing against a young tree in Owosso. No one bothered to remove it, so the tree grew around it.

The Stump Mother, a tree within a tree stump, grows near Alger, about 10 feet from the highway.

MISSISSIPPI

The G-trees of Biloxi are pines famous for their freak growth which cannot be caused, as many believe, by the breaking over and continued growth toward the light, of an individual tree, because there are a considerable number of trees in different groups, all of which, small as well as large, have developed the same peculiar shape. According to a forester, the explanation lies in the death of the central terminal shoot and the subsequent effort of the tree to replace it by substituting one of its laterals or side branches.

MISSOURI

An elm, an oak, and two sycamores grow from one common trunk, 4 miles from Pineville, McDonald County, on the bank of the Elk River. The trunk itself is a homogeneous whole. Above the union

of the common trunk are two large divergent trunks of an elm and a sycamore respectively, and two smaller ones—an oak and a sycamore. Each tree—in leaf, branch, and bark true to its type—leads a normal life.

NEW JERSEY

Lyre Tree, an elm of freak growth, at the corner of Northfield Avenue and Falcon Street, Livingston (fig. 50).

A "tree on stilts", on the Delaware River near Philipsburg, is an elm tree about 200 years old. Its roots are exposed to a depth of about 10 feet. The rushing waters of the Delaware in the spring freshets have carried the soil away until the great tree is left on stilts. The oldest residents in the neighborhood say the tree was on stilts when they were small boys.

Siamese Twins, two monster hollies about 65 feet high, are growing a few miles from Sea Isle City, on the island of Five Mile Beach. About 15 feet from the ground, a branch now nearly a foot in diameter grew out from one of the trees and in some unknown manner forced its way through the trunk of the adjoining tree, thus solidly joining the two trees. These trees are of the same thickness and height. Both are thrifty.

Rainbow Tree is a wild cherry within a stone's throw of the Wildwood station of the island of Five Mile Beach, a few miles from Sea Isle City. The trunk of this tree, more than 2 feet in diameter, after describing an arch or rainbow, rises as straight as an arrow to a height of 30 feet.

NEW YORK

A publication of the New York State College of Forestry (*70*), contains descriptions of nearly 50 freak trees in the State. Among these are:

Twin beeches, in the Morrisville swamp and in Peterboro swamp.
Elm lyre trees, near Prattville, and at Oswego.
Apple tree with five distinct trunks at Fulton.
Hemlock growing in the crevice of a high cliff of trap rock near Tuxedo.
Locust trees forming a gateway at Saugerties.
Eight cedar trees growing from one stump, Putnam.
An elm tree growing from old stonework, Auburn.
The Lonesome Pine, which grows in a small tuft of moss and huckleberry bushes on top of a boulder.

OKLAHOMA

Affection Elms, at Shawnee, are trees that were twined together when young.

OREGON

Cannibal Tree. A Douglas fir entirely enclosing an Oregon white oak, was reported by the director of the Pacific Northwest Forest Experiment Station. A cross section of the Cannibal Tree at the experiment station verifies the story.

An elm tree, planted upside down 15 years ago, is flourishing in Portland. From the gnarled roots grow leaves larger than those on normal elm trees. This tree was reported in the Sunday Star, Washington, D. C., March 22, 1936, with a photograph, by the Associated Press.

Tillamook County, in the Coast Range Mountains, has a freak Sitka spruce. Sitka spruce is ordinarily one of the stateliest, most symmet-

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FIGURE 50.—LYRE TREE, AT LIVINGSTON, N. J. (COURTESY OF C. L. WALLACE, EAST ORANGE, N. J.)

rical trees and is the largest of the spruces. The freak is a deformed spruce growing among its faultless fellows. Some distance above ground, but apparently while the tree was still in the sapling stage, some accident of growth caused the sending out of two emergency stems horizontally in opposite directions. These horizontals, turning upward after a few feet, form a U which extends to the natural height of the tree.

PENNSYLVANIA

Old Elephant Tree is a peculiar remnant of a grand old catalpa tree, in Bristol. This is a gigantic stump more than 25 feet high, which, from one viewpoint, looks like an elephant standing on its hind legs. It stands in front of an old homestead and attracts the curious attention of all passers-by.

The swamp white oak and red maple twin tree, one-half mile south of Doylestown, is a voluntary union of two trees of widely dissimilar families, so rare that it is worthy of record. The first union in growth is about 10 feet from the ground, and the upper and much smaller union is about a foot above the first. The trees are slightly united at other points, and other junctions are in process of forming.

Siamese Twin white oak is near the village of Gardenville, about 4 miles from Doylestown. Except at the base and again a few feet farther up where they again join, there are two perfect trunks. The oval-shaped opening was not produced by disease or insects.

RHODE ISLAND

The Little Old Man in the Tree is a curiously formed English oak on an estate at Newport, so-called because of the twisting of the branches just where the branching begins.

TENNESSEE

The Tree With a Handle is near Madisonville. A small limb of this tree has practically completed a circle and grown back through the trunk.

VIRGINIA

Jamestown Churchyard Sycamore, which separates the tombs of James Blair, founder of William and Mary College, and that of his wife, Sarah Harrison, has attracted attention for many years because of the havoc it has wrought. Today the sycamore holds within its hollow trunk one fragment of a marble slab while another may be seen embedded in the base of the trunk.

Octopus Tree, Charles City County, is a tuliptree or yellow poplar, 27½ feet in circumference 6 feet from the ground and is thought to be more than 500 years old. Some hundreds of years ago, the limbs were probably broken or bent by savages or wild animals, so that they have been distorted into the semblance of a writhing octopus.

A cedar tree growing in the fork of a locust tree at Rectory has reached such size that it is splitting the locust in two, as reported in the Washington Post, August 1, 1935.

WASHINGTON

Armed Oak, at Chehalis, has grown around an old rifle laid in the fork years ago.

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