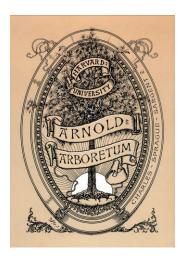
Archives VI CBC

Pennsylvania Chestnut Tree Blight Commission Photographs 1913: Guide.



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VI CBC Pennsylvania Chestnut Tree Blight Commission Photographs, 1913: Guide. Archives of the Arnold Arboretum of Harvard University 125 Arborway, Jamaica Plain, Massachusetts

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Descriptive Summary

Repository: Archives of the Arnold Arboretum of Harvard University, Jamaica Plain, MA Call No.: VI CBC Location: Archives Title: Pennsylvania Chestnut Tree Blight Commission Photographs, 1913 Date(s): ca1913 Creator: Pennsylvania Chestnut Tree Blight Commission Quantity: One box, one bound album Language of material: English Abstract: This collection documents the effects that chestnut blight, also known as

Abstract: This collection documents the effects that chestnut blight, also known as chestnut tree bark disease, had on chestnut trees throughout Pennsylvania. The Photographs of primarily diseased chestnut trees were taken by the Pennsylvania Chestnut Tree Blight Commission c1912 and 1913.

Note: Access to Finding Aid record in <u>HOLLIS</u>.

Preferred Citation: Pennsylvania Chestnut Tree Blight Commission Photographs collection. Archives of the Arnold Arboretum of Harvard University.

Additional Material: Related historical materials, such as conference proceedings and reports of the Pennsylvania Chestnut Tree Blight Commission, may be found by searching "chestnut blight" in <u>HOLLIS</u>. Since 1983, the <u>American Chestnut</u>

<u>Foundation</u> has led efforts to restore the American chestnut. To learn more, see the <u>Journal of the American Chestnut Foundation</u>, or read about the Foundation's history in <u>Mighty Giants: An American Chestnut Anthology</u>.

Processing Information

2011, Alison Kobierski. Revised 2023, 2024, Larissa Glasser.

Acquisition Information

Provenance: This collection was the gift of Winthrop Sargent (1853-1932), chairman of the Pennsylvania Chestnut Tree Blight Commission. The photographs were removed from a deteriorating album and rehoused in plastic sleeves after being photocopied on their original pages. The photocopies were bound and now are part of the collection.

Terms of Access

Researchers seeking to examine archival materials are strongly encouraged to make an appointment. The Director, or an office of origin, may place restrictions on the use of some or all of its records. The extent and length of the restriction will be determined by the Director, office of origin, and the Archivist.

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Historical Note

The collection documents the findings of the Pennsylvania Chestnut Tree Blight Commission through a series of images that were taken c1912-1913 as part of a survey of Pennsylvania's trees. Photographs of trees being felled and milled and sketches of the blight-causing fungus are included as well. This collection documents the effects that chestnut blight, also known as chestnut tree bark disease, had on chestnut trees throughout Pennsylvania. Introduced in the United States in the early 20th century, the first signs of the fungus were discovered in New York City in 1904, and by 1912 it was observed in points as far apart as eastern Massachusetts and northern Virginia. Concern over the destruction of trees and subsequent effects to state and local economies led to a conference in Harrisburg, Pennsylvania, that was held on February 20 and 21, 1912, and was called by John K. Tener (1863-1946), who was governor of Pennsylvania from 1911 to 1915. Chestnut trees were used to make tannic acid (used in tanning), telegraph and telephone poles, and railroad ties, and chestnuts themselves were harvested for consumption, so a shortage of the trees was not insignificant.

The <u>Pennsylvania Chestnut Tree Blight Commission</u>, also known as the Pennsylvania Chestnut Blight Commission, was commissioned by Tener to stop the spread of chestnut blight and eradicate the disease in the western part of the state (approximately 6.5 million acres of woodland). With the June 1911 bill that established the commission, he committed \$275,000 to its efforts to stop the blight from moving west. Mark Alfred Carlton managed the project, sending two hundred field agents to inspect trees in western counties; in eastern counties, tree surgeons advised homeowners on ways to save their ornamental chestnut trees from blight. In the west, over 50,000 infected trees were destroyed. In the east, the diseased portions of trees were removed and the resulting wounds covered with creosote. The commission disbanded in August of 1913 after requests for another \$275,000 were denied.

Winthrop Sargent (1853-1932) served as chairman of the commission during its brief existence. A cousin of Arnold Arboretum director Charles Sprague Sargent (1841-1927) and painter John Singer Sargent (1856-1925), he was a Pennsylvania native. During his lifetime he was involved in various industries, including the railroad, paint, cement, and coal. While he helped lead the effort to save Pennsylvania's chestnut trees, he was concerned with other forms of preservation as well; Sargent was instrumental in preserving an ancestor's Revolutionary War-era home in Gloucester, MA, and he published <u>Epes</u> <u>Sargent of Gloucester and His Descendants</u>, an extensive family genealogy, in 1923.

Scope and Content

Materials include photographs that were removed from the original bound photograph album, rehoused in sleeves and maintained in their original order, and a bound photocopy of the photograph album.

Photographers are indicated where known, and estimated dates are included where possible.

Arrangement

The collection is arranged into 2 series

Series I: Photographs Series II: Photograph Album

Container List Box 1 Series 1: Images

Note: Photographs are kept in the order in which they appeared in the original album and are identified by the original caption. The numbering system of the images reflects their original order. Images are first identified by page number (1, 1.a, etc.). Where there were multiple images on one page that had the same caption, only the page number is used to identify both. Where multiple images on a page had different captions, the images are identified by the page number and whether they were located on the right or left side of the page. The images in this finding aid are not to scale. The majority of the original images are approximately 5''x7'' in size.

1. Pennsylvania – Chestnut tree blight commission. Collection of photographs.[*Title page*]



1.a: A typical healthy chestnut tree loaded with fruit – Crawford Co. Pa.(*above*)



2: Healthy chestnut timbers in a woodlot - Bedford Co. Pa. (above)



3: Virgin forest of chestnut and white pine – Forest Co. Pa. [Taken by E.T. Kirk. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31,1912,* this image is identified as "Virgin forest of chestnut and white pine in Warren County, Pennsylvania. Two chestnut trees two feet in diameter; white pine in back ground, 40 inches in diameter." c1912] (*above left*) A logging slide – Potter Co. Pa. (*above right*)



4: A chestnut tree 35 years old, grown from seed, planted by the farmer in foreground, Crawford Co. Pa. *(above)*



5. An ineffectual attempt to save a valuable shade tree, .Haverford, Pa. (above)



6. Chestnut trees in the last stages of destruction by the blight – Bala, Pa. (above)



7. Fort Washington – Valley Forge Park. All of these trees are infected with the blight. *(above left)* Destruction of young trees by blight, Valley Forge Park. *(above right)*



8. Destruction of chestnut trees by the blight – Valley Forge Park. [Photographs taken by William Currie, Pennsylvania Chestnut Tree Blight Commission photographer. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* this image is identified as "Young stand of chestnut killed by blight, Valley Forge, Pennsylvania." c1912] (above)



9: A fine old chestnut tree killed by the blight – Valley Forge Park. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* this image is identified as "Chestnut shade tree killed by *blight*. Philadelphia, Pennsylvania."c1912] (above left): A blight-killed chestnut tree, Bala, Pa. (above right)



10: Blight-killed timber, Valley Forge Park.(*above left*) : Badly blighted stand of chestnut showing improper surgical treatment, Haverford. (*above right*)



11. A healthy Paragon chestnut tree in the orchard at Emilie, Pa. **(left) 11.** Ravages of the blight in the chestnut orchard at Emilie, Pa. *(above right)*



12: Blight-killed chestnut trees in southeastern York County. (above)



13. Destruction of a chestnut orchard by the blight, Martic Forge, Lancaster Co. Pa. [Photographs taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* these images is identified as "Chestnut trees in orchard, killed by chestnut blight, Bucks county, Pennsylvania." c1912] (above)



14: Chestnut sprouts killed by the blight – Oxford, Chester Co Pa. [Photographs taken by E.T. Kirk. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* image is identified as "Sprouts killed by blight on tract near Oxford, in Chester County, Pennsylvania." c1912] (above)



15: Typical chestnut blight cankers. [Photograph taken by William Currie. In the *Report* of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912, this image is identified as "Blight canker on branch showing characteristic swelling and cracking of bark on young wood." c1912] (above)



5.a: Canker on thick-barked tree, exposed when tree was struck by lightning.(*above left*): Fan-shaped mycelium of blight fungus in thick bark. (*above right*)



15.b: Small leaves due to tree being girdled by blight. [In the *Final Report of the Pennsylvania Chestnut Tree Blight Commission, January 1 to December 15, 1913, image is identified as "A common mark of the blight. Small leaves which developed in the early spring on a top recently girdled by the blight, showing midsummer condition. Withered leaves above the canker; sprouts below."] (above left) sprouts from base of girdled tree. (above right)*



16: A chestnut (in foreground) showing effects of girdling by the blight. Note dead top above canker and vigorous growth of sprouts below – Valley Forge Park, Pa. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* image is identified as "Young chestnut tree with top killed by Blight. Note drooping, shriveled leaves and dense growth of sprouts below the canker. Valley Forge, Pennsylvania." c1912] (*above left*): A chestnut shade tree half killed by the blight – Bucks County, Pa. (*above right*)



17: View of chestnut trees in winter condition showing top branches girdled by blight which still retain withered leaves – Chester Co. Pa. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912, image is identified as "Diseased chestnut tree girdled at the top, showing how the persistent leaves cling to the dead branches after the foliage from the healthy part has fallen." c1912] (above left): Enlarged view of blight-infested branch showing pustules (above right)*



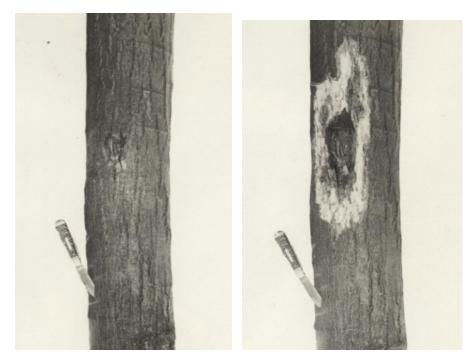
18: Chestnut tree in winter condition showing top girdled by blight – Chester Co. Pa. [Taken by E.T. Kirk. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* image is identified as "Blighted chestnut tree showing how "The Danger Signals' appear in winter." In the *Final Report of the Pennsylvania Chestnut Tree Blight Commission, January 1 to December 15, 1913,* it is captioned, "Winter condition of a chestnut tree with a blight-girdled top." c1912] (above left) Near view of a branch girdled by blight, showing typical withered leaves and partly developed burr. (above right)



19: View of chestnut trees in the center of a spot infection near St. Mary's, Elk Co. Pa. Group of 3 trees (right) probably first infected in 1908. Group of 2 trees (tagged on left) probably infected in 1909. [Photograph on left taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* image is identified as "Center of infection in spot infection of 296 trees located in Benzinger township, Elk County, Pennsylvania. (above left) : The blight probably started on this tree in 1908." In the *Final Report of the Pennsylvania Chestnut Tree Blight Commission, January 1 to December 15, 1913,* this image is identified as "Center of spot infection at St. Mary's, Elk County, Pa. This tree was infected at least four years prior to the time the picture was taken." c1912] (above right)



19.a: Blight cankers on young chestnut sprouts – Oxford, Chester Co. Pa. [Taken by E.T. Kirk. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* this image is identified as "Cankers on sprouts killed by Blight, near Oxford, Chester County, Pennsylvania." c1912]: (above left) Hypertrophied canker. (above right)



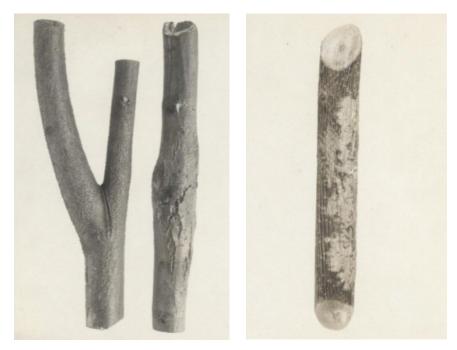
20: Showing the evil effects of "bumping" chestnut trees with rocks to dislodge nuts. Blight gained entrance through the wound shown on the left and spread in a single season through the darkened area shown in the photo on the right. *(above)*



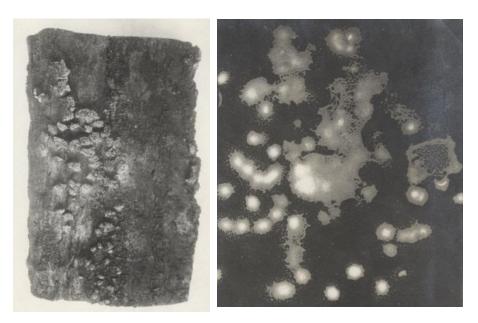
21: Views taken on the McKelvey tract, Somerset Co. Pa, showing the effects of a sleet storm in breaking down the chestnut trees. The blight in most cases entered the trees through these wounds. [Photograph taken by E.T. Kirk. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* image is identified as "Chestnut sapling broken by sleet storm. The blight had entered this tree where it was broken. Somerset County, Pennsylvania." c1912] (above)



22: A blight canker several years old showing the manner in which sprouts develop. (*above left*) : An old blight canker showing the characteristic disintegration of the bark.(*above right*)



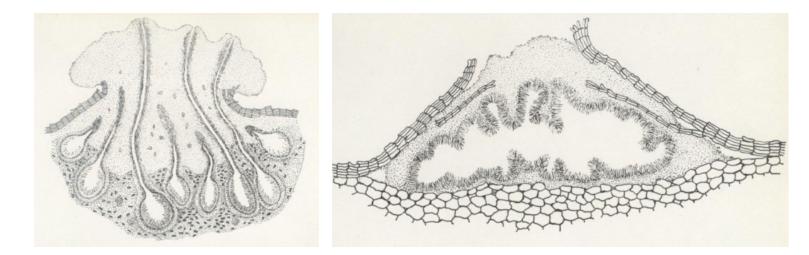
23: Various forms of chestnut blight cankers. [Photographs taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* the image on the left is described, "The figure on the left shows the fruiting pustules bursting through the bark. The figure at the right shows a young infection with an enlargement, which is often characteristic in vigorous branches." The image on the right is identified as "Amoeboid infection on two year old sprout." c1912] (above)



24. Enlarged view of bark bearing the winter stage (perithecia) of the chestnut blight fruiting bodies. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* this image is identified as "Perithecial pustules from rough bark." c1912 (above left): Enlarged view of winter spores forcibly ejected from perithecia onto a glass slide. (above right)



25: View showing fruiting bodies of the chestnut blight fungus, which have developed crevices of the bark. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* this image is identified as "Rough bark showing broad bands of perithecial pustules in the crevices. Spores shot from this specimen were used in making the ascospore cultures described in this report." c1912] (*above left*) : Section of a canker (enlarged) showing "spore horns" of the blight. (*above right*)



26: Drawing to show a cross section of a pustule of the chestnut blight in its winter (perithecial) stage. (*above left*) :Drawing to show a cross section of a blight pustule in ts summer (conidial) stage. (*above right*)



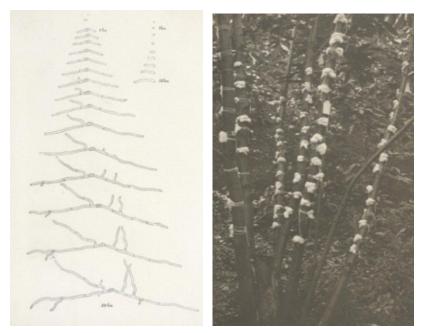
27: Laboratory of The Pennsylvania Chestnut Tree Blight Commission, University of Pennsylvania. *(above left)*: Portion of the Pennsylvania Chestnut Tree Blight Commission's Greenhouse at the University of Pennsylvania, showing tables used in investigating ants as blight distributors. *(above right)*



27.a: Spore horns of blight fungus. *(above left)* :Cultures of the blight fungus *(above right)*



27.b: Inoculating a tree with the blight, Field Laboratory – Charter Oak, Pa.(*above left*) Canker produced by inoculation. Rings show monthly growth. (*above right*)



28. Drawings which show the relative growth of chestnut blight fungus from winter spores (left) and summer spores (right) in 22 hours.(*above left*): Inoculations made in the experimental plots in the field laboratories at Charter Oak, Pa. (*above right*)



28.a: Comparative growth of blight fungus (right) and "Connelsville" (sic) fungus (left) from inoculations.(*above left*) : Inoculations cut out by surgical methods. (*above right*)



28.b. Scouting for the blight. [In the *Final Report of the Pennsylvania Chestnut Tree Blight Commission, January 1 to December 15, 1913,* this image is captioned, "Thorough scouting for the blight is necessary."] (*above left*): Diseased tree, blazed and tagged. (*above right*)



29: Typical sprout growth of chestnut. Blight was found in both of these stands and required several thorough scouting's to locate all of the diseased trees because of the dense growth. *(above)*



29.a. Cutting out a "spot infection" in heavy timber – Bedford Co., Pa. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* this image is identified as "Spot infection in Bedford County, consisting of sixteen large chestnut trees." In the *Final Report of the Pennsylvania Chestnut Tree Blight Commission, January 1 to December 15, 1913,* this image is captioned, "Cutting out a spot infection among large trees." c1912] (above)



30: Felling and peeling diseased chestnut trees. *(above)*



30.a: Peeling base of diseased tree before felling *(above left)* :Cleaning up and burning an infection. *(above right)*



30.b: Cleaning up and burning improperly done. (*above left*) : Infection burned. [In the *Final Report of the Pennsylvania Chestnut Tree Blight Commission, January 1 to December 15, 1913,* this image is identified as "Properly burned stump; stump on the left cut too high."] (*above right*)



30.c: Paragon chestnut orchard – Martic Forge, Pa (*above left*) : Injecting a fungicide into a diseased chestnut tree. (*above right*)



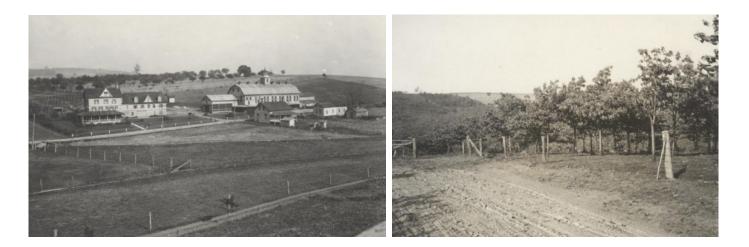
31. Spraying chestnut trees after surgical treatment, DuPont Estate, Kennett, Pa. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* this image is identified as "Spraying Bordeaux Mixture 4-5-50 on large chestnut trees at estate of Pierre DuPont. Sprayed every two weeks from April to middle of November, 1912. Kennett Square, Pennsylvania." c1912 (above left): Chestnut trees killed by the blight, Oyster Bay, L.I. (above right)



32: Chestnut blight canker which started in a wound made by a climbing iron. *(above left)* :Surgical treatment to remove a very young blight infection. *(above right)*



32.a: Chestnut trees killed by the blight – Oxford, Chester Co. Pa. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* image is identified as "General view of dead trees killed by the blight near Oxford, Chester County, Pennsylvania." c1912] (*above left*) Railroad ties made from blighted chestnut trees. (*above right*)



33: The farm and part of the Paragon chestnut orchard belonging to Col. C.K. Sober, Paxinos, Northumberland Co., Pa. *(above)*



34: Interior of Col. C.K. Sober's house, showing chestnut lumber used for finishing purposes. [Taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* image is identified as "Chestnut used for interior finish." c1912] (*above left*) :Chestnut nursery stock in Col. C.K. Sober's nursery ready for shipment, showing tags of the Chestnut Tree Blight Commission attached after the trees were individually inspected and dipped in fungicide. (*above right*)



35: Portable sawmill working in blighted timber and a portion of the product. [Photo on left by taken by E.T. Kirk. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* this image is identified as "Portable saw mill sawing logs from blighted trees." c1912] (*above*)



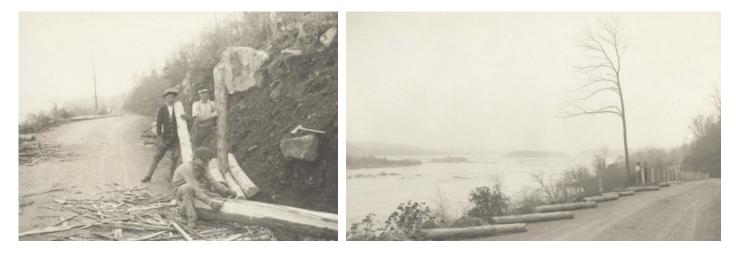
36: Telephone and telegraph poles made from blighted chestnut trees. *(above)*



37: Stave mill and staves from blighted chestnut wood on the Estate of Col. H.C. Trexler, Allentown, Pa. [Photographs taken by William Currie. In the *Report of the Pennsylvania Tree Blight Commission, July 1 to December 31, 1912,* the image on the left is captioned, "General view of portable stave mill operating in blighted chestnut. This kind of mill can utilize chestnut unfit for saw logs or shingles." The image on the right is identified as "Staves made from blighted chestnut, bundled, ready for shipping." c1912] (above)



38: Portable stave mills in the mountains of central Pennsylvania. *(above)*



39. Blighted chestnut trees utilized for fence posts, York Co. Pa. (above)



39.a.: Cordwood of chestnut and other species to be manufactured into charcoal – Somerset Co. Pa. *(above left)* : Blighted chestnut made into fencing – Chester Co. Pa. *(above right)*



40: Portable sawmill sawing blighted chestnut trees into timbers for barn framing –Oxford, Chester Co. Pa. *(above)*



40.a: A "stag headed" chestnut tree – Mercer Co. Pa. (*above left*) : Base of tree showing roots injured by trampling of cattle. (*above right*)



41: Chestnut trees in western Pennsylvania showing unhealthy condition of tops due to borers and the pasturing of cattle – Crawford Co. Pa. (above left): Stub of a chestnut tree which was probably killed by borers – Somerset, Pa. (above right)



42: Virgin white pine and hemlock, Warren, Pa (*above left*): White pine reproduction in an old pasture, Huntingdon, Pa. (*above right*)



43: Trees killed by soft coal smoke near Pittsburgh, Pa. (above)



44: Chestnut trees killed by an unknown fungus which causes cankers somewhat similar in appearance to those made by the chestnut blight – St. Mary's, Elk Co. Pa. *(above)*





45. Hemlock barn piled at a tannery near Warren, Pa. *(above top)*. Chestnut and other woods being manufactured into charcoal – Somerset, Pa. *(above bottom)*

Series 2: Photo Album Copy

Bound photocopy of the original Chestnut Tree Blight Commission photograph album. Because of its deteriorated condition, the album was copied, and the photographs were removed and placed in plastic sleeves. This volume shows the images in their original arrangement, complete with handwritten captions.