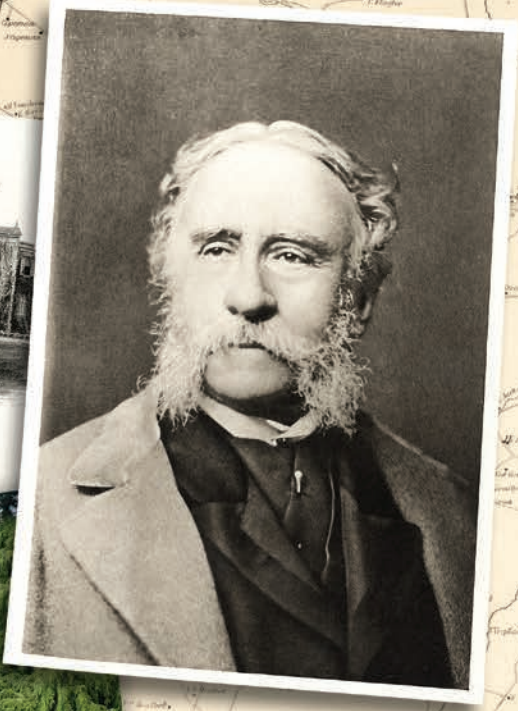




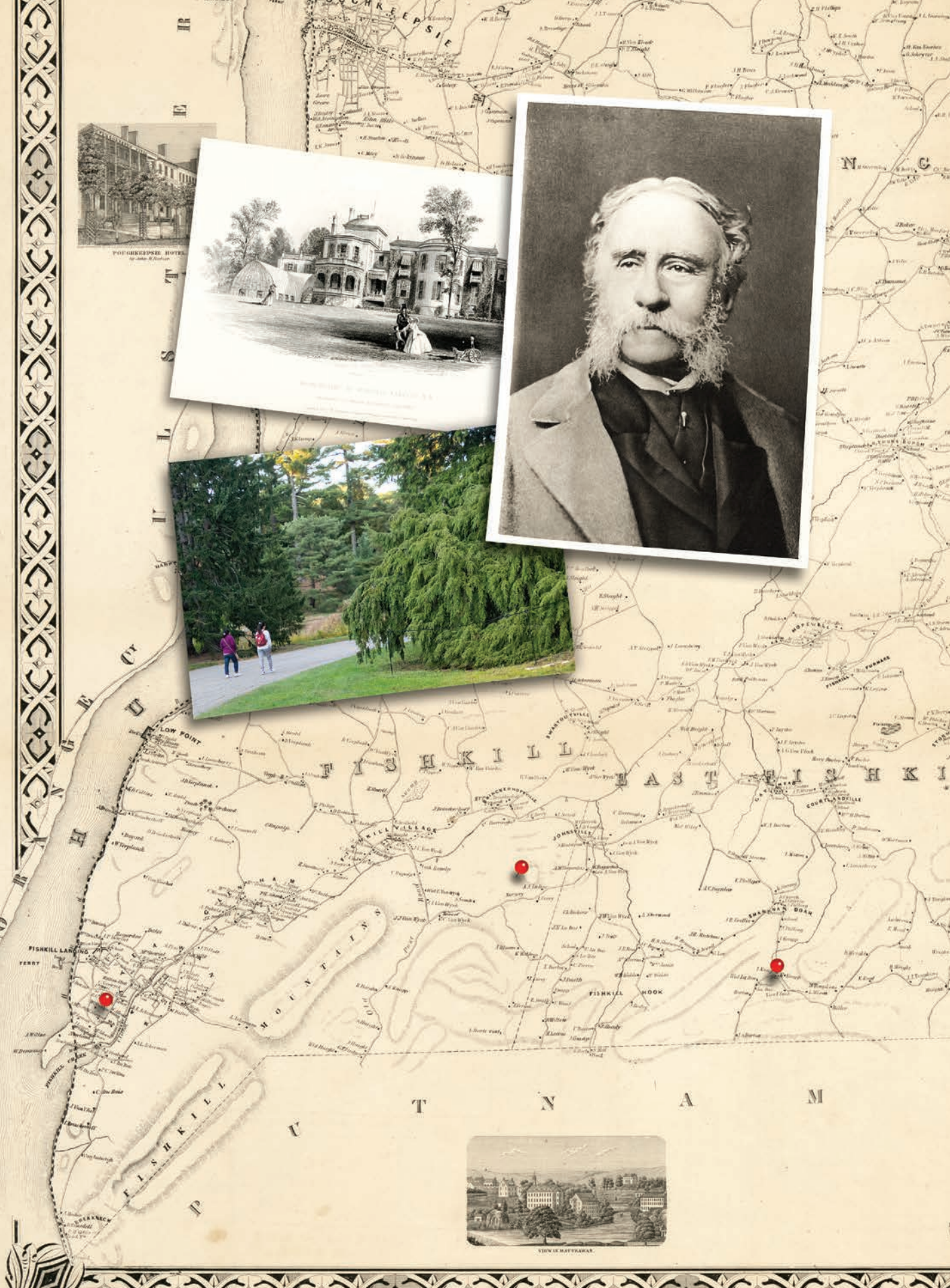
POUGHKEEPSIE HOTEL
of John W. B. Smith



POUGHKEEPSIE HOUSE
of John W. B. Smith



VIEW OF HASTINGS



Closing the Book on Sargent's Weeping Hemlock

Peter Del Tredici

Sargent's weeping hemlock (*Tsuga canadensis* 'Sargentii') is one of the world's greatest dwarf conifer cultivars in terms of its beauty, longevity, and stability. As opposed to the typical eastern hemlock with a tall straight trunk reaching upwards of a hundred feet, the weeping variety is a totally horizontal tree that can form a giant dome of foliage up to twenty feet high by forty feet across—"a vernal fountain of perpetual joy" is what one writer called it.¹

The tree was discovered in the mid-nineteenth century in the Hudson Highlands,² about sixty miles northeast of New York City. This part of the world was a critical supply depot for the Continental Army during the American Revolution, and later its scenic vistas inspired both the Hudson River School of painting and the "picturesque" landscape movement championed by Andrew Jackson Downing. This region is one of the areas where modern American ornamental horticulture first took root, and many of its earliest practitioners built country estates in the area based on aesthetic principles that Downing laid out in his writings from the 1840s and 50s.

One such horticultural pioneer was Henry Winthrop Sargent, the man for whom the weeping hemlock was named. In 1841, he purchased a twenty-two-acre parcel of woodland overlooking the Hudson River at Fishkill Landing—also known as Fishkill-on-the-Hudson—where he developed a country estate called Wodenethe, which included sweeping vistas and an especially notable collection of conifers.³ Sargent's younger cousin Charles Sprague Sargent, the first director of the Arnold Arboretum, would describe the conifer collection as "the most complete in the United States." H. W. Sargent made his place famous by describing the design and construction of its grounds in the supple-

ment to the sixth edition of Downing's classic book, *A Treatise on the Theory and Practice of Landscape Gardening*, published in 1859.

In an update to the supplement, in 1875, Sargent produced a vivid description of the "gardenesque" landscape effects he sought to achieve through the use of exotic plants with extreme growth habits and foliage textures and tints. "There should be certain groups all color, other groups all form, and others again pendulous or drooping," Sargent wrote. "But these colors and forms must be harmoniously arranged by very careful blending. Sometimes in contrast (not so great as to shock), and sometimes by the delicate merging and intermingling of one color with another, the deeper and darker first, to disappear and melt away as it were into the lighter and fairy-like tones." For Sargent, landscape gardening was more about art than science, and the garden itself was a kind of living sculpture. The weeping hemlock that now bears his name fit so perfectly into Sargent's gardenesque landscape style that, as has been said, had he not introduced it, he would have invented it.⁴

My own interest in Sargent's weeping hemlock began in 1970. I had just moved to Boston from California and was teaching biology to children ages five through eighteen at an experimental school in Watertown, Massachusetts. Always on the lookout for interesting field trips, I visited the Arnold Arboretum for the first time in the fall of that year. In my aimless wandering, I came across a bizarre, low-growing tree with twisted, ribbon-shaped branches, the likes of which I had never seen before—it was Sargent's weeping hemlock. Why did it have its amazing shape? Where did it come from? How did it get here? Although I did not recognize it at the time, I had been seduced by the tree and the Arboretum where it was growing.

Facing page: The story of Sargent's weeping hemlock often centers on the plant's namesake, Henry Winthrop Sargent, who grew the horticultural curio at his estate, Wodenethe, in the Hudson River Valley. But archival discoveries have introduced new characters to the story.

When I finally began working at the Arnold some nine years later, in 1979, my interest in Sargent's weeping hemlock was rekindled when Augustus M. Kelley, publisher of Theophrastus Books in Little Compton, Rhode Island, wandered into the Dana Greenhouses where I was the assistant plant propagator and, without introducing himself, started talking to me about weeping hemlocks. At some point in the conversation, after I had expressed interest in the topic, I mentioned that I had a theory about why hemlocks weep. Gus said he'd like to hear it and, after listening carefully for about five minutes, asked if I would write it up. I told him I'd think about it, and a year later, I published my first-ever article for *Arnoldia*, the magazine of the Arnold Arboretum: "Sargent's Weeping Hemlock Reconsidered."

As soon as the article was published, however, I discovered several new references related to the origin of the tree, including one that pushed its first mention in print from 1875 to 1868. Gus suggested that this new information warranted an update of the weeping hemlock story and offered to publish a book about the tree if I would write it. To make a long story short, *A Giant Among the Dwarfs* came out in 1983, providing a new account of the tree's history. There were still gaps in the story, of course, but I did my best to fill them with well-reasoned speculation. Predictably, after the book came out, people wrote to me with new information about various specimens of Sargent's weeping hemlock, which I dutifully stashed away in a file folder, never really expecting to revisit the subject.

In the years since the publication of my book, the internet was invented, and the door that I had closed some thirty-six years ago cracked open with the unexpected discovery of a statement from H. W. Sargent himself, in 1880, about who actually discovered the tree that carried his name. One thing led to another, and the cold case of the true discoverer of Sargent's weeping hemlock suddenly got very hot. With the help of various websites—especially the Biodiversity Heritage Library—I was able to access a slew of old references that shed new light on the story of how this sublime conifer came into being. And so, it is with some trepidation that

I make my third attempt at resolving the contradictions that have plagued Sargent's weeping hemlock since its discovery. Hopefully, this time will be the charm.

In the Beginning

Based on research that I completed for *A Giant Among the Dwarfs*, I concluded—correctly as it has turned out—that the first written reference to Sargent's weeping hemlock was from 1868. The critical passage appears in *The Book of Evergreens* by Josiah Hoopes, a well-known nurseryman and conifer specialist, in the midst of his description of H. W. Sargent's Wodenethe estate. "Near the mansion are two very handsome specimens of *Araucaria imbricata*, grown in boxes," Hoopes wrote, referring to the monkey puzzle tree (now *A. araucana*). "These had attained the height of 5 or 6 feet, and were perfect examples of this species in a young state. Near these we noticed a remarkable variety of the Hemlock Spruce, of dwarfish habit, with long drooping branchlets, and altogether quite unique in character. This plant was found growing on the mountains near by."

On the basis of the description alone, one could not say absolutely that Hoopes was talking about Sargent's weeping hemlock, but when the location of the discovery on a nearby mountain is added, the plant could be nothing else. Hoopes, nonetheless, omits the tree from the main body of the book where the "hemlock spruce" (listed as *Abies Canadensis*⁵) and two of its varieties are discussed, suggesting that the plant was relatively unknown in 1868.

I recently found a second reference to the plant at Wodenethe in an 1874 article about mutant conifers by one Thomas C. Maxwell, a nursery owner from Geneva, New York. "On Mt. Hounes, Fishkill-on-the-Hudson, is found a sport from our well known Hemlock," Maxwell reports. "The species we all know is remarkably graceful and beautiful, lofty and grand, but this sport grows down as persistently as the Kilmarnock Willow—a real deformity, and yet on Mr. Sargent's lawn it is one of the most interesting and ornamental plants in his entire collection—'a thing of beauty,' with which scarcely another tree or plant on these most beautiful grounds or in all the land can compare."



The author first encountered Sargent's weeping hemlock in 1970, at the Arnold Arboretum, and was instantly enamored with its unusual form.

ARNOLD ARBORETUM MAP (1969); ARNOLD ARBORETUM SPECIMEN IN 1970 (10712-A)/BOTH ARNOLD ARBORETUM ARCHIVES

It took me a while to figure out that "Mt. Hounes" was an alternate spelling for what is today known as Honness Mountain, a 906-foot "peak" near the present-day town of Fishkill—about five miles northeast of Wodenethe.⁶ Maxwell's description of the tree is particularly noteworthy because he describes how the wild weeping hemlock that was discovered on Honness Mountain—"a real deformity"—was transformed into "a thing of beauty" after being cultivated at Wodenethe, as if the plant had somehow gone to finishing school.

Sandwiched between these two early references to H. W. Sargent's stunning new hemlock was a more complete description of the tree published by Frank Jessup Scott in his monumental work, *The Art of Beautifying Suburban Home Grounds of Small Extent*. Curiously, there are two different versions of this book with an 1870 publication date: One is 274 pages long and deals mainly with garden design issues. The other contains an additional 244-page section titled "Part II: Trees, Shrubs and Vines," which contains detailed descriptions of woody ornamental plants suitable for planting in home landscapes.

In the shorter of the two 1870 editions, Sargent's weeping hemlock is mentioned only in the fifteenth chapter, "Plans of Residences and Grounds." This section of the book presents written descriptions of twenty-nine hypothetical landscape layouts, along with detailed drawings showing the locations of recommended plants. In the seventh plan (as well as in seven others⁷), Scott uses the letter *H* to designate the position of a plant he identifies as "Sargent's hemlock, *Abies canadensis inverta*" and recommends that "its main stem to be kept tied to a stake until it has a firm growth six feet high." Remarkably, this first attempt at giving Sargent's weeping hemlock a proper scientific name is one of only two times that the epithet *inverta* appeared in print.

In the longer of the two 1870 editions of *Suburban Home Grounds*, which is identical in all respects to an 1873 edition (except for the date), Scott preserves the use of the name *Abies canadensis inverta* in the chapter "Plans of Residences and Grounds," but in the second part, under the entry on "Hemlock Fir," he introduces a new name for the tree, "Sargent's Hemlock: *Abies canadensis Sargentii*." He



Henry Winthrop Sargent's house at Wodenethe, photographed in 1886.

goes on to describe it as being "of an eccentric rambling nature, but well clothed in verdure," and he provides information about its cultivation: "Grown without training it will probably be a broad, irregular, flat-headed tree or great bush, with an over-laying of downward growing branches like that of the Scamston elm. By grafting it well up on other trees, or by tying its leader to a stick or stake we believe it will be one of the prettiest and most picturesque of evergreens. The best effect will be produced when grafted well up on an ordinary hemlock stem."

While Scott's use of two different names for Sargent's weeping hemlock in the longer of the two 1870 editions is confusing, the discrepancy suggests that there was a gap between the publication of the two editions. In fact, I found a review of the longer version of the book in the August 1871 issue of *The Horticulturist* by Henry T. Williams, which clearly suggests that the complete version of Scott's book did not

come out until mid-1871. For whatever reason, this edition retained the 1870 publication date and constitutes the earliest publication of the name *Abies canadensis Sargentii*.

In the longer of the two 1870 editions of his book, Scott also states that the plant had been "brought into notice by H. W. Sargent, Esq., who found it growing wild on Fishkill mountain." I could find no reference for this specific mountain in the literature of the period, but given that the town of Fishkill lies at the base of Honness Mountain, which is shown as part of the "Fishkill Mountains" in period maps, it could well have been an alternative name for it. If so, then Scott is in agreement with Maxwell that Sargent's weeping hemlock was discovered on Honness Mountain. Scott and Maxwell also agree on the need to stake up Sargent's weeping hemlock in order to make it a proper "ornamental" plant and that without this treatment it would sprawl across the ground, eventually forming a strongly pendulous shrub.

One final detail in Scott's description of Sargent's weeping hemlock that should be noted appears in the appendix at the end of the second part where he lists "Sargent's Hemlock" as reaching ten feet tall by ten feet across under the column headed "Usual Size 12 Years from Seed" and thirty feet tall by forty feet across under the column "Usual Size at Maturity." When I first read these numbers in the early 1980s, I couldn't figure out how Scott managed to come up with them given that they were written just two years after Hoopes published the first written description of the tree, so I chalked it up to a lucky guess.

The Parsons Brothers of Flushing

Scott's description of Sargent's weeping hemlock and his prescient projections about its size clearly suggest that its propagation must have been well underway in the early 1870s. Samuel B. Parsons of S.B. Parsons & Sons, Kissena Nurseries in Flushing, New York, confirmed this supposition in a lecture that he presented on November 12, 1874, to the Rural Club of New York, with many prospective clients in attendance. "But the gem of all gems is the Weeping Hemlock," Parsons declared. "If left to itself, it will remain trailing upon the ground, but if the leader is tied to a firm stake it can be carried to any reasonable height, and each tier of branches will then droop in graceful curves toward the ground." A year later, in October 1875, Parsons sent a letter to the editor of *The Garden* introducing Sargent's weeping hemlock to British audiences, using the name *Abies canadensis* var. *pendula*. Parsons's promotion of the weeping hemlock to both national and international audiences clearly suggests that he was already selling or getting ready to sell the plant to the general public.

As far as I have been able to determine, however, it was the nursery owned by Parsons's brother, Robert, who first offered Sargent's weeping hemlock for sale in the fall of 1874. Some two years earlier, in the fall of 1872, the brothers had decided to split up Parsons & Sons Nursery, which they had inherited from their father and jointly operated since 1841. Samuel got half of the plant stock and established S.B. Parsons & Sons, Kissena Nurseries in a new

location in Flushing while Robert took control of the other half of the stock and remained at the original nursery site but changed the name to R. B. Parsons & Co.⁸

In his fall 1874 catalogue, Robert Parsons listed Sargent's weeping hemlock under the heading "*Abies canadensis*, weeping." Ten one-foot-tall plants were available for the reasonable price of eight dollars, and ten larger plants (up to two feet tall) were selling for twelve dollars. Samuel's firm, S.B. Parsons & Sons, first offered the weeping hemlock in their autumn 1877 wholesale catalogue. Both brothers clearly had a financial stake in the success of the plant and cooperated in introducing it into cultivation.

One of the curiosities of the weeping hemlock history is that up until 1875—after its production and sale was well underway—the supposed discoverer of the plant, H. W. Sargent, had said nothing about it. He finally broke his silence in the fourteen-page supplement he wrote for the ninth edition of Downing's *Treatise on the Theory and Practice of Landscape Gardening*: "*Abies Canadensis pendula*, or *Sargenti*, as sometimes called, is a very interesting and distinct variety of hemlock," Sargent wrote. "It is as pendulous as a Weeping Cherry, perfectly hardy, and admirably adapted for small places, though as yet very rare, Messrs. Parsons, of Flushing, alone having plants for sale. It is a sport of our native Hemlock, found in the Fishkill Mountains." This brief description occurs in the supplement to the 1875 edition of Downing's book but is not included in his 1859 supplement to the sixth edition where fifty-one pages are devoted to "The Newer Evergreen Ornamental Trees." This omission is significant because it suggests that Sargent did not learn about the tree until after 1859.

From Fishkill to Philadelphia

One of the long-standing questions surrounding the history of Sargent's weeping hemlock concerns the date when it was first propagated for commercial sale. In 1939, Arlow B. Stout of the New York Botanical Garden identified J. R. Trumpy, the propagator for the Parsons & Sons Nursery, as the person who visited Fishkill and collected scions from H. W. Sargent's plant, but Stout didn't provide a date for the

trip. Trumpy was a Swiss-born horticulturist who immigrated to America in 1856 to work for the Parsons Nursery.⁹ When the Parsons brothers split up the nursery in 1872, Trumpy went to work for Samuel's newly established S. B. Parsons & Sons (the name Kissena Nurseries was added later), and their very first *Descriptive Catalogue*, from 1873, listed him as propagator on the title page. Thanks to a recently discovered article in an 1877 issue of the *Moore's Rural New-Yorker*—written by the magazine's "conductor," Elbert S. Carmen—we now know what happened when Trumpy went to Fishkill in search of Sargent's weeping hemlock:

Grace is not an adjective often serviceable in descriptions of Evergreens, but it is the first that comes to mind in any attempt at describing the Weeping variety of the Hemlock spruce [*Abies Canadensis pendula*]. The variety is comparatively new and its history interesting. The original tree was, as we learn, in the possession of an old gentleman named BURROW. Mr. J. R. TRUMPY, the well-known propagator of one of the Parsons of Flushing, heard about it, and visited BURROW for the purpose of purchasing the tree. But BURROW would not sell. Mr. TRUMPY, thus disappointed, and having a desire to possess so promising a novelty, which only those who have their hearts in the business can understand, set out for Mr. H. W. SARGENT'S (Fishkill, N. Y.), who, he had been informed, was possessed of a small specimen which, either from a layer or graft, was derived from the original tree of Mr. BURROW'S. Mr. SARGENT was gracious to the enthusiastic TRUMPY, who left him with a pocketful of cions [sic], and from this start the Weeping Hemlock was propagated and disseminated.

This stunning description of J. R. Trumpy's trip to Fishkill came as a complete shock to me and upended the traditional story of Sargent's weeping hemlock by asserting that the mysterious Mr. Burrow was in possession of the "original tree" and that Sargent's tree had been propagated from Burrow's plant. In light of the publicity that the tree had received prior to 1877, it's surprising that none of the earlier writers—or any of those that came after—

mentioned Burrow, a sign that naming him as discoverer must have been somewhat controversial. The other remarkable thing about Carmen's article is that it is accompanied by the first known illustration of Sargent's weeping hemlock, which shows a healthy young specimen grafted about five feet up on the understock.

Curiously, the lingering question of when Trumpy actually visited Fishkill does not get answered until eleven years later when Carmen published a second article about Sargent's weeping hemlock, in an 1888 issue of the *Rural New-Yorker*, that repeated (and embellished) his earlier story about Trumpy's trip to Fishkill and described how best to use the tree in the garden.¹⁰ Carmen ended his article with "A Note from S. B. Parsons," which offhandedly revealed when Trumpy's fateful visit had occurred. "I do not know the precise age of my Weeping Hemlock, but conjecture it is 25 years old, as it was one of the first we grew when we discovered it in the grounds of Mr. H. W. Sargent in 1861," Parsons stated. "My specimen is 11 feet in height and 13 feet in diameter of foliage. Its height has been obtained by training up a leader, and there is no reason why it cannot be carried 20 feet high." In light of this 1861 date, Scott's 1870 prediction that a mature weeping hemlock would be thirty feet high by forty feet across no longer seemed so outlandish.

In addition to introducing Burrow into the weeping hemlock story and identifying Sargent's "small specimen" of the weeping hemlock as the source of Parsons's first propagation material, both of Carmen's articles present a negative assessment of the attempts to make the tree more ornamental by grafting it "upon high stocks." His 1877 article is particularly blunt: "But the great expectations of securing an evergreen tree-form of unique and incomparable grace, thus reasonably entertained, have not been fulfilled." To support this assessment, Carmen quotes Samuel Parsons as saying, "We graft it readily upon high stock in the nursery, but it does not thrive as well—the naked stem cracks and suffers and the massive foliage, like most evergreens perched on high stems, is too

Facing page: Jean R. Trumpy (right) propagated Sargent's weeping hemlock on behalf of the nurserymen Samuel and Robert Parsons. Samuel (left) began promoting the plant in 1874, the same year that his brother, Robert, offered it in the fall catalogue for R. B. Parsons & Co.



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The first three illustrations of Sargent's weeping hemlock depicted specimens that had been grafted high: The first (bottom) appeared in *The Rural New Yorker* in 1877. The second (left) appeared in the *American Agriculturist* that same year. The third illustration ran in *The Garden* in 1887 and depicted a specimen, grafted in 1862, that was eleven feet tall by thirteen feet across.

heavy for grace and proportion, and is beaten and tossed by the winds." In November of 1877, just four months after Carmen's first article came out, the botanist George Thurber published an article in the magazine he edited, *American Agriculturist*, which echoed Carmen's negativity about high-grafting weeping hemlocks and published the second known illustration of Sargent's weeping hemlock.

The intensity of the debate about whether to graft the weeping hemlock high or low on the understock dates back to 1870 when Scott advocated grafting "well up on an ordinary hemlock stem" in his initial description of the tree. In 1874, Samuel Parsons implicitly supported the practice of high-grafting when he stated that

such weeping hemlocks were "more like an evergreen fountain than any tree known." In Carmen's 1877 article, however, Parsons came out against high-grafting, and he repeated his opinion ten years later in *The Garden*, an English publication edited by William Robinson. Curiously, Parsons chose to illustrate this article with an image of an extremely beautiful, twenty-five-year-old specimen growing on the grounds of his nursery that had clearly been high-grafted and trained to a stake.

The fact that three prominent horticulturists expressed strong negative opinions about high-grafted weeping hemlocks suggests there must have been serious survival issues with specimens propagated this way. In addition, Parsons com-

mented that such plants were “too heavy for grace and proportion,” subtly expressing his preference for the low-growing specimens that, in 1874, he had disparaged as “trailing upon the ground.”

The first commercial sales of Sargent's weeping hemlock took place in 1874 and 1875 and were followed by the tree's first public showing at the famous 1876 Centennial Exposition in Fairmount Park, Philadelphia. In what must have been a remarkable display, 105 exhibits in the “Ornamental Trees and Shrubs” division were arranged in the landscape surrounding Horticultural Hall.¹¹ In his 1878 report on the Centennial Exposition, the chairman of the Awards Committee, William Saunders, published a detailed description of eight of these exhibits, only one of which was reported to contain specimens of the weeping hemlock—the Hoopes Brother & Thomas Nurseries of West Chester, Pennsylvania. Amazingly, their display featured three separate varieties of weeping hemlock: *Abies Canadensis inverta*, *pendula*, and *Sargentii*. Contrary to my expectations, Saunders's descriptions of both the S. B. Parsons and R. B. Parsons exhibits noted that varieties of *Abies Canadensis* were present but did not specifically mention any weeping types.

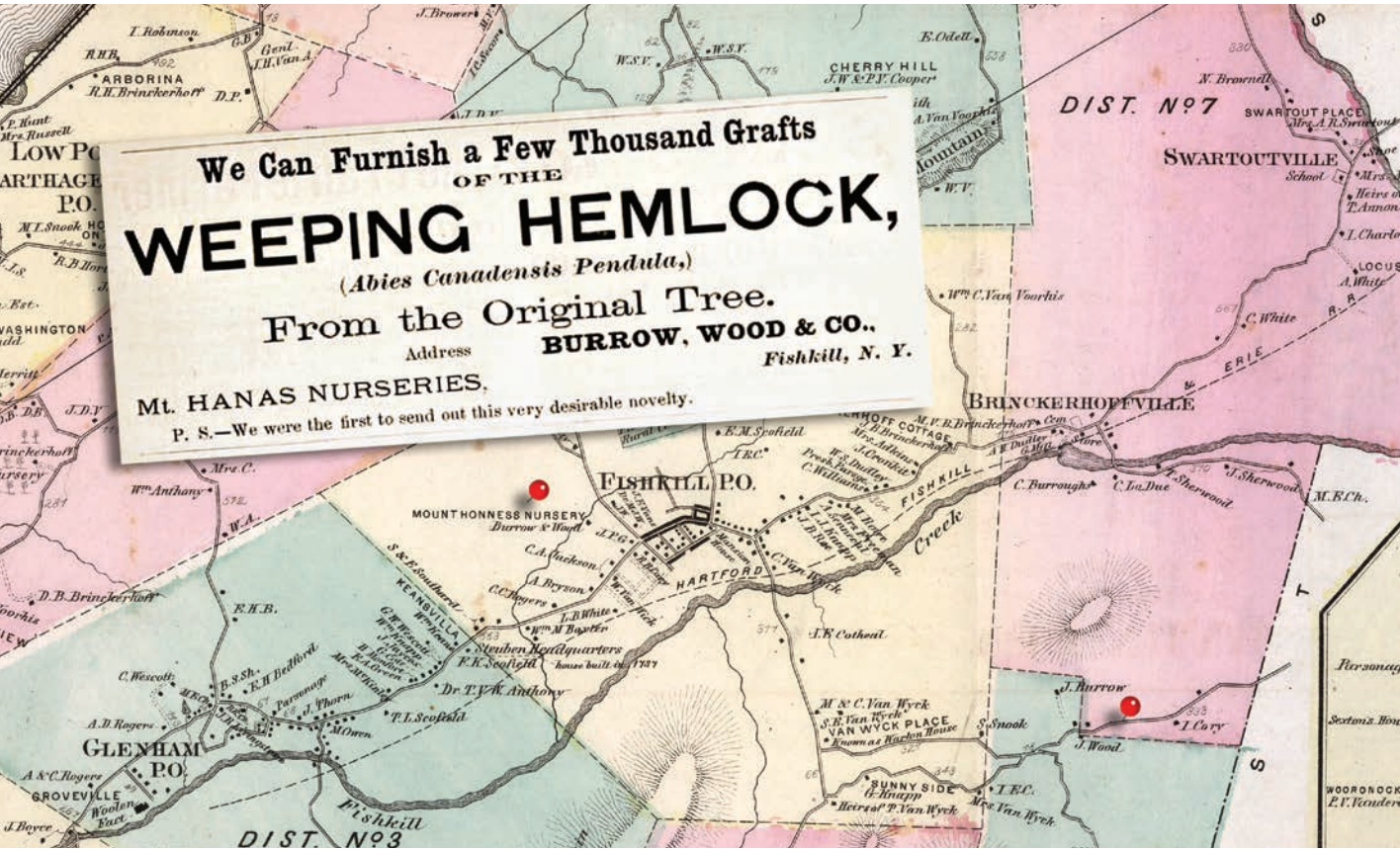
After the exposition ended in November, the commissioners of Fairmount Park arranged to purchase the plants used in the nursery exhibits for planting in the park. According to a December 15, 1876, report by Eli K. Price, chairman of the Committee on Trees and Nurseries for the Fairmount Park Commissioners, many of the nurseries that displayed plants at Horticultural Hall—including Hoopes Brother & Thomas, R. B. Parsons & Co., and S. B. Parson & Sons Co.—“were actuated by a liberal desire that their collections should remain in the Park, and offered them at prices which they esteemed little over half the cost to them. It was an object to the Commissioners to secure these permanently for our Park, to be transplanted as thinning out shall be required for their healthy growth, and they have been secured by purchase.” Later records indicate that at least four weeping hemlocks were planted near Horticultural Hall, on a site that had formerly been occupied by the Women's Pavilion.¹²

Who Deserves Credit?

The fact that Scott initially referred to the weeping hemlock as *inverta* in 1870 but quickly changed it to *Sargentii* suggests that there might have been an issue deciding who deserved credit for introducing the plant. This idea is supported by the story of the weeping hemlock that Carmen published in 1877, which credited the mysterious “BURROW” with discovering the tree. In his second article, from 1888, Carmen made a bold proposal to formalize Burrow's role over that of Sargent's: “Now this Weeping Hemlock is catalogued as *Abies Canadensis Sargentii pendula*. Ought not the varietal name to be *Burrowii pendula*, in justice to the originator? Otherwise we should say that Mr. Trumpy's name should be given, since it was due to him rather than to Mr. Sargent that the tree was introduced.”

It took a while, but I eventually figured out who Burrow was thanks to a pair of advertisements I came across in the January and February 1875 issues of *The Horticulturist and Journal of Rural Art and Taste*. The advertisements—for Burrow, Wood & Co., Mt. Hanas Nurseries—offered “a few thousand grafts” of the weeping hemlock from the “Original Tree.” This not only confirmed Carmen's assertion that someone named Burrow played a central role in the weeping hemlock story but also identified him as a nurseryman living in the town of Fishkill. A quick check of the 1880 census records for the town of Fishkill indicated that John G. Burrow was born in 1839 and lists his occupation as “Hybridizer & Originator of New Variety of grapes.” He had two partners, the brothers Isaac C. and Joseph J. Wood, both listed in the 1880 census as “nurseryman.”¹³

The Burrow, Wood & Co. advertisements raise the intriguing question of why Sargent insisted in late 1875 that the Parsons brothers were the only ones selling the weeping hemlock when he certainly must have known that Burrow, Wood & Co.—located just five miles from his home in Fishkill Landing—had started selling the plant earlier that year. Could it be that Sargent was annoyed that Burrow claimed to have discovered the weeping hemlock before he did and therefore chose to ignore him? This



An 1875 advertisement for Burrow, Wood & Co. confirmed the role of an enigmatic character in the weeping hemlock story: John G. Burrow, a nurseryman who lived at the base of Honness Mountain.

ADVERTISEMENT (BURROW, WOOD & CO., 1875)/BIODIVERSITY HERITAGE LIBRARY, DUTCHESS COUNTY, NY, MAP (1867)/DAVID RUMSEY MAP COLLECTION, DAVID RUMSEY MAP CENTER, STANFORD LIBRARIES

idea is supported by two items in the advertisement: first, an unusual postscript at the end of the advertisement, “P.S.— We were the first to send out this very desirable novelty,” indicates that Burrow, Wood & Co. was directly challenging the Parsonses’ claim to have introduced the tree into commerce; and second, by using the name *pendula*¹⁴ to describe the weeping hemlock—as opposed to *Sargenti*—they were rejecting proposals to attach Sargent’s name to the plant. Clearly, the issue of priority had caused bad blood between Burrow and Sargent, especially in light of Carmen’s 1877 statement that Burrow had provided Sargent with his first weeping hemlock.

One final detail in the Burrow, Wood & Co. advertisement that should be noted is that the name of their nursery, “Mt. Hanas,” is an alternate spelling for what is now called Honness Mountain—the same location where both Maxwell and Scott said the weeping hemlock

had been discovered. An 1867 map of Dutchess County by Frederick W. Beers clearly shows “Mount Honness Nursery, Burrow & Wood” located about a half-mile west of the center of Fishkill. The map also shows the home of “J. Burrow” nestled into the south slope of Honness Mountain. I suspect that this coincidence is best explained by the fact that both Maxwell and Scott were referring to the specimen of the tree—“The Original Tree”—that Burrow had growing on his property rather than to one he had found growing in the wild.

An Evolving Myth

Following its commercial debut in the mid-1870s, Sargent’s weeping hemlock became something of a horticultural sensation. In 1897, fifteen years after Sargent’s death, his cousin Charles Sprague Sargent, director of the Arnold Arboretum in Boston, attempted to formalize the tree’s origin story in a *Garden and Forest*



Taxonomist Alfred Rehder photographed the Sargent's weeping hemlock at Holm Lea, in Brookline, in 1900.

article. He noted that the plant had been found "about forty years ago on the Fishkill Mountains, in New York, and was first cultivated and made known by Mr. H. W. Sargent ... Several of these plants were originally found together and transplanted and the largest of them which I have seen is on the Howland estate, in Matteawan, New York, and is now about twenty five feet across. This variety has been propagated by grafting the branches on the ordinary Hemlock, but in a few years, the grafted plants form an erect stem and lose the dense low habit which is the charm of the original seedlings."

Keeping in mind that Sargent's statement was written some forty years after the events described, it puts the date of the discovery at "about" 1857. For the first time, the article also reports that "several plants were found together and transplanted," but it does not say by whom. Indeed, Sargent carefully counters Scott's 1870 suggestion that H. W. Sargent was the discov-

erer of the "seedlings" by noting that he was the one who "first cultivated and made known" the tree. Sargent followed his cousin's lead by not mentioning John Burrow or Honness Mountain, but he does weigh in on the high-grafting debate by expressing his preference for the low-branched "seedlings."

Sargent's article is also noteworthy because it mentions that one of the original plants was growing at the Howland estate in the village of Matteawan (now Beacon), New York. This marks the first time that General Joseph Howland is mentioned in connection with the weeping hemlock, but Sargent does not credit him with its discovery. This attribution came fifteen years later, in 1912, in an unsigned article in the Arnold Arboretum's *Bulletin of Popular Information* written by Sargent's colleague Ernest H. Wilson:¹⁵

Many years ago, four or five plants of this form [*Tsuga canadensis* var. *pendula*] were found by

the late Joseph Howland of Mattapan [sic], New York, on one of the mountains back of Fishkill Landing on the Hudson River and were named by him Sargent's Hemlock for his friend and neighbor Henry Winthrop Sargent. One or perhaps two of these wild plants are now living, although the variety has been much propagated by nurserymen by grafting its branches on the common Hemlock ... The plant in the Arboretum on Hemlock Hill Road is a grafted plant, but at Holm Lea in Brookline there is one of General Howland's original plants.

In Wilson's retelling of the weeping hemlock story, he makes several mistakes: first, he confuses Howland's hometown of Matteawan with a Boston suburb, Mattapan, and then he goes on to identify Howland as the discoverer of Sargent's weeping hemlock when no one else mentioned him in this role. The saving grace of Wilson's article is that he mentions, for the first time, that one of the original weeping hemlocks was growing at C. S. Sargent's private estate, Holm Lea.

In 1923, the British horticulturist Murray Hornibrook put the finishing touches on this widely cited but factually challenged version of the weeping hemlock story in *Dwarf and Slow-Growing Conifers*: "Professor Sargent informs me that the nurseryman's stock has all been produced from grafts from the four original plants found near the summit of Fishkill Mountain (near Beacon City, on the Hudson River) by General Joseph Howland about 1870. The finder grew one in his own garden at Matteawan, N.Y., gave the second to Mr. Henry Winthrop Sargent of Fishkill; the third to Mr. H. H. Hunnewell¹⁶ of Wellesley, Mass., and the fourth to Professor C. S. Sargent of Brookline, Mass. The second and third are dead, but the first and fourth have made very fine specimens."

The Horton Hemlock

Hornibrook's Sargent-approved version of the weeping hemlock story from 1923 received its first serious challenge in 1939, when Arlow B. Stout of the New York Botanical Garden announced to the world that "the largest and presumably the oldest specimen of this type

(*Tsuga canadensis* var. *pendula*) is a tree that stands in stately splendor in its original wild location on the mountainside overlooking the hamlet of Hortontown," about eight and a half miles as the crow flies from H. W. Sargent's home in Fishkill Landing. According to Stout, "My first knowledge of this tree was during 1937 when it came into view as I passed by auto along the newly constructed Eastern State Parkway [now the Taconic State Parkway]." The tree was sixteen feet tall and had a single trunk—eighteen inches in diameter—that was unbranched for its first five feet. Stout interviewed the owner of the tree, Joseph Horton, who told him that he had known the tree "since sixty-five years [1874] and that it was then at least one half as large as it is now."

In February 1980, when I first visited the Horton hemlock, it was owned by Jacob Veldhuis, who was using the tree—which was over eighteen feet tall and thirty-one feet across—as a kind of storage shed, a use to which it was admirably, if ignobly, suited. The pendant branches concealed no less than half a cord of wood, a hundred-gallon oil tank, a ladder, a wheelbarrow, several packages of shingles, and innumerable other artifacts of country life. The branches that formed the tree's canopy grew out from the trunk at about eight feet, and within the canopy, considerable self-grafting occurred where the branches touched one another.

In his 1939 article, Stout noted that the Horton hemlock was growing "close to a dwelling," but I was surprised to see that it was only about twenty feet away from the corner of the house—a fact that cast some doubt in my mind on Stout's "original wild location" hypothesis, as did the tree's single, unbranched trunk. This doubt was reinforced by the fact that I had been told that the so-called "Knapp house" where the tree was growing predated the American Revolution. At the same time, however, I chose to ignore the fact that the tree was growing at the edge of a relatively steep, rocky slope where it was unlikely to have been planted.

Having seen the Horton hemlock in the flesh, I felt the need to learn more about it, so

Facing page: Eva Scofield, photographed in 1938 (bottom), stands with the Horton weeping hemlock. The tree grew outside of a family home that first appeared on maps as "E. Horton, Grocery" in 1876. The author first visited and photographed the plant in 1980.

I persuaded Jack Karnig, chief forester at the nearby (and now disbanded) Harvard Black Rock Forest in Cornwall, New York, to take core samples from the lowest branches on the tree—at heights of five and six feet—in order to calculate its age. The cores that Jack sent me in March of 1980 came with the following note: “Your hemlock was a son of a b----. Twice I bored and got nothing. Finally got a reserve borer (smaller one) and managed to pull two cores.” Under the dissecting microscope at the Arboretum, I counted 119 rings in the lower of the two cores—with an average width of 0.5 millimeters—which meant that the tree was *at least* five feet tall in 1860. In other words, the Horton hemlock was already a substantial tree when Burrow and Sargent first learned about it!

While I was surprised by the 1860 date, I was still skeptical that the tree was growing in its original wild location given its single-trunk form and its proximity to the house. My suspicions were confirmed a year later when I unexpectedly discovered two photographs of the Horton hemlock in the Arnold Arboretum Archives. They were taken in May 1938 by Ormond Hamilton, a noted conifer enthusiast from Conway, Massachusetts, and the handwritten caption on the back of one of them stated that the tree was “growing on place of Miss Eva Horton, Horton Town, Hopewell Junction, N. Y. This is not far from Beacon, N. Y. It was transplanted from mountain back of Beacon to its present site by Miss Horton’s grandfather.”

I was stunned by this discovery, and in 1983, when I published my book on Sargent’s weeping hemlock, I rejected Stout’s theory that the Horton hemlock was the original tree in its original location and postulated instead that “grandfather Horton discovered at least five weeping hemlock seedlings on the mountains between Hortontown and Beacon, New York. Sometime after 1859 but before 1865, he collected one plant for himself (and staked it) and sold the rest to H. W. Sargent.” At the time, I naively thought I had finally solved the mystery of Sargent’s weeping hemlock.

Inspired by my book, Dennis Murphy of Warwick, New York, wrote me a letter on July 17, 1986, describing how he had visited the Horton hemlock in the company of a local dairy

farmer, Vern Jackson, who told him that the house adjacent to the tree had been used as a store for many years. Murphy also spoke with Smith Townsend, one of the oldest residents in the area, who told him that Eva Horton’s grandfather Alvah never lived in the house and that her father, Joseph, did not move there until “after the death of Enoch Horton [in 1913] who was the last proprietor of the store.” According to Townsend, Enoch, Alvah, and Joseph Horton were all buried in the cemetery located behind the old Calvary Methodist Church on Hortontown Road, and indeed, when Murphy visited the cemetery, he located the tombstones for both Alvah and Enoch.

When I received Murphy’s letter, I had no idea what to think given that it upended my published version of the origin of Sargent’s weeping hemlock. I thanked Dennis for his letter and filed it away. And that’s where things sat until 2015, when, by chance, I came across a statement by H. W. Sargent, from 1880, about who really discovered the weeping hemlock. This unexpected discovery got me thinking about the tree again and prompted me to pull out my old files where I rediscovered the letter from Dennis Murphy and the questions it had raised. One thing led to another and, with the help of the internet and several local historians, I was able to piece together the history of the Horton family farm.

It turns out that the house where the tree was located—now listed as 339 Hortontown Road, Hopewell Junction—was not pre-Revolutionary at all but had been constructed by Enoch Horton in 1874, on an acre of land he acquired from his father, Jefferson Horton, for the price of one dollar.¹⁷ A local map from 1876 shows 339 Hortontown Road as “E. Horton Grocery” just as Vern Jackson had remembered. The same map, as well as one from 1854, shows Jefferson Horton’s house just down the road apiece. According to Smith Townsend (as reported by Dennis Murphy), Alvah Horton lived about a half mile away from Jefferson Horton on Long Hill Road, and Alvah’s son, Joseph, moved into the house on Hortontown Road after Enoch Horton’s death in 1913.

In 1939, Joseph Horton told Stout that he had “known” the weeping hemlock since 1874—when he was thirteen years old—which coin-

cidentally was the date that Enoch Horton acquired land from his father and would have begun clearing the land around the weeping hemlock in order to build his house. In 1938, Joseph Horton's daughter, Eva Scofield, told Ormond Hamilton that her grandfather had transplanted the tree "to its present site," but this is highly unlikely since her grandfather Alvah never lived in the house where the tree was located. Given that the Horton hemlock was at least five feet tall in 1860, the most plausible explanation for why it was growing where it was is that it had always been there.

The Internet to the Rescue

As stated above, my research on Sargent's weeping hemlock remained dormant until 2015, when in the course of doing internet research on the history of the introduction of Japanese plants into North America,¹⁸ I came across an article from 1880 by Samuel Parsons Jr., the son of nurseryman Samuel B. Parsons and an eminent landscape architect and horticulturist in his own right. The article was a transcript of a "prize lecture" Parsons delivered in Boston before a meeting of the Massachusetts Horticultural Society on January 17, 1880. In his talk, Parsons described in detail—and at length—how best to use the flood of new woody plants that were coming into the market, especially Japanese species recently introduced by his father's company, Kissena Nurseries.

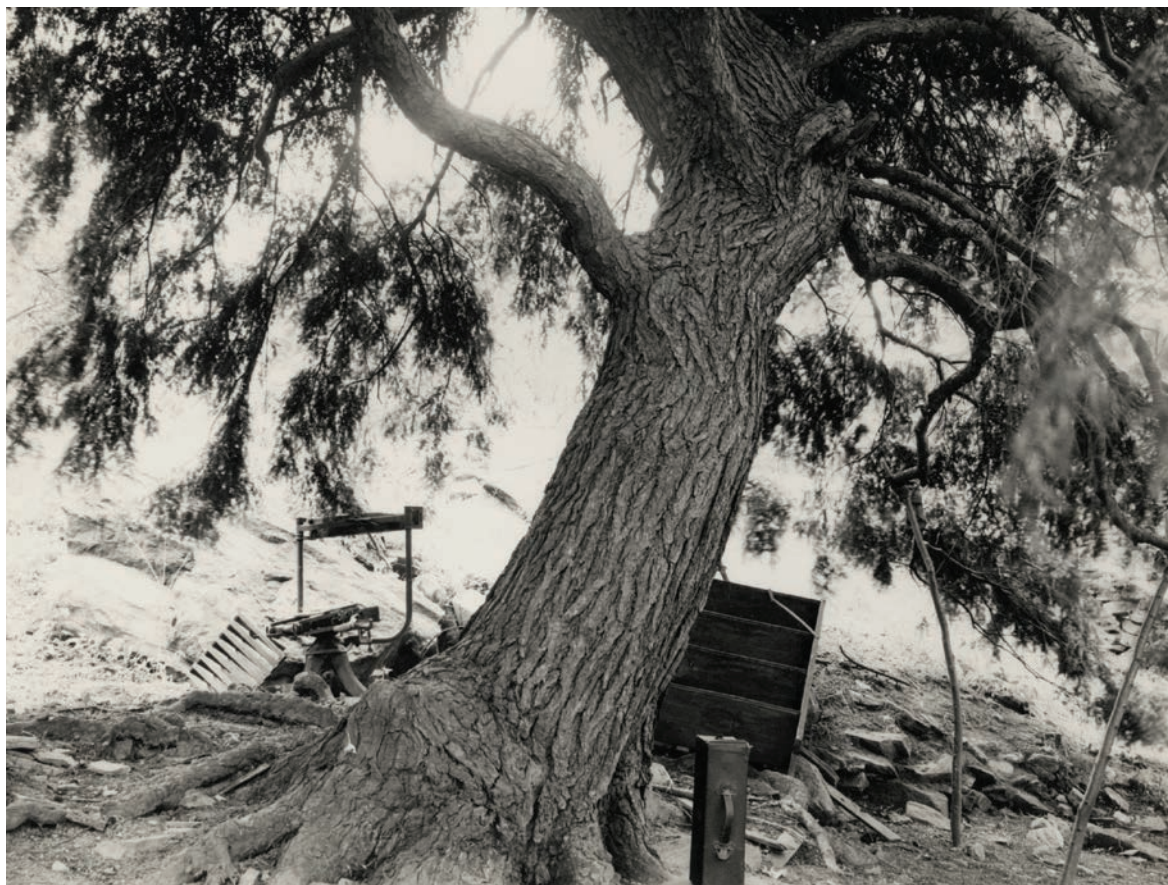
Three-quarters of the way into his presentation, Parsons mentioned Sargent's weeping hemlock. "If the broad-leaved hemlock [*Abies Canadensis macrophylla*] is somewhat stern and masculine in its outline," Parsons began, "the weeping hemlock [*Abies Canadensis pendula Sargentii*] is essentially feminine in its graceful curves and fountain-like sprays of green." Parsons went on to credit H. W. Sargent for discovering the tree "about twenty years ago [1860], near his place, at Fishkill on the Hudson, and moved by his enthusiasm and appreciation of choice ornamental trees, entrusted it for propagation to the distinguished expert, J. R. Trumpy."

As I reached the end of Parsons's article, a paragraph appended to the conclusion of his lecture caught my attention. In it, the chairman of the Saturday morning meeting, the nursery-

man William C. Strong of Brighton, Massachusetts, thanked Parsons for his lecture and then said that he was going to cut the discussion short so that the attendees could hear from "a gentleman well known to be thoroughly versed in the subject before the meeting, and the editor of the new edition of Downing's *Landscape Gardening*—Henry Winthrop Sargent, of Fishkill, N.Y., of whose presence he desired the Society to have the advantage." Strong went on to report that "Mr. Sargent spoke first of the weeping hemlock, which was first introduced by him, and which he said was a very good 'find' by an old farmer on the mountains back of his (Mr. Sargent's) house. He has the largest tree of it, which is eight feet high, and spreads from fifteen to twenty feet. He has assisted the leader by tying it up to a stake. It is difficult of propagation."

This brief quote—a proverbial smoking gun—struck with the force of a thunderbolt. Shockingly, Sargent contradicted Parsons who, just a few minutes earlier, had claimed that Sargent had discovered the weeping hemlock. No, says Sargent, the tree was found by an "old farmer" who had a large specimen of it at his home. The fact that Sargent specifically says, "He has assisted the leader by tying it up to a stake" is undoubtedly a reference to the single-stemmed Horton hemlock. In addition, Sargent's use of the present tense indicates that the "old farmer" who found the weeping hemlock was still alive as of 1880. Assuming a discovery date in the late 1850s, Enoch Horton, born in 1846, would have been too young to qualify as Sargent's "old farmer." But his father, Jefferson Horton (1804–1888), was still living at the time of the lecture and would have fit the bill—especially given that the 1860 census lists his occupation as "farmer." Taken together, all the evidence indicates that Jefferson Horton discovered Sargent's weeping hemlock growing wild on his own property.

The size of the Horton hemlock in 1880—eight feet high by fifteen to twenty feet across—coupled with my tree ring data showing that the tree was at least five feet tall in 1860, strongly suggests that Frank Scott had seen the tree and used it as the basis for his prediction that Sargent's weeping hemlock would reach a mature size of thirty by forty feet. It also seems possible



The size and age of the Horton weeping hemlock, photographed here in 1938, suggests that it was the original tree—staked in the location where Jefferson Horton found it. The photographer, Ormond Hamilton, reported that the trunk measured twenty-two inches in diameter at three feet off the ground.

that John Burrow knew about the Horton weeping hemlock and that it was the “Original Tree” he referred to in his advertisement from which he had produced “a few thousand grafts.”

Hemlock Layering

Around the time that I discovered H. W. Sargent’s bombshell statement in 2015, I was also working on an article documenting the layering behavior of hemlocks growing wild on Wachusett Mountain, in central Massachusetts.¹⁹ My research showed that the low-hanging branches of stunted hemlocks growing on exposed, rocky sites can form adventitious roots where they come in contact with the soil and, over time, readjust their orientation from horizontal to vertical. In a moment of clarity, it dawned to me that the layering behavior of hemlocks that I had observed on Wachusett Mountain might

be relevant to Jefferson Horton’s discovery of the weeping hemlock.

Could it be that the low-growing “seedlings” that C. S. Sargent first mentioned in 1897 were actually rooted branch layers dug up from the periphery of the wild weeping tree that Horton discovered? To my mind, finding a lone weeping hemlock with attached branch layers is much more plausible than finding five virtually identical mutant seedlings growing in one place. If there was just one original weeping tree sprawling across the ground, then it was probably growing on a sunny, exposed site with thin soil—similar to the examples that I observed on Wachusett Mountain—and its strongly pendulous lower branches would have been retained long enough to develop into layers.

If this layering theory is applied to Sargent’s weeping hemlock, it seems likely that when

Jefferson Horton discovered the weeping hemlock on a steep, rocky slope on his own property, it would have been growing prostrate along the ground. Assuming the tree behaved like the ones I saw on Wachusett Mountain, he might well have dug up a couple of the layered branches and sold them to Burrow and Sargent. He then tied a branch on the remaining plant to a stake to create a single trunk. It also seems possible that he might have induced his tree to form the additional layers by pinning its pendulous branches to the ground.

Evidence for the layering of Sargent's weeping hemlock comes from multiple sources: First, many of the mature, multistemmed specimens of the tree display layered lower branches. In fact, Al Fordham, a former propagator at the Arnold Arboretum, successfully removed one such layer, in 1966, from the weeping hemlock that C. S. Sargent had planted at his Brookline estate, Holm Lea. Second, when the nurseryman Jacob C. van Heiningen²⁰ spoke to Stout about the origins of Sargent's weeping hemlock, in 1939, he reported that he had stopped grafting the hemlock because of their poor survival rate and that he had propagated several hundred plants by "the old fashioned way of layering which is naturally perfect, as they are on their own roots."²¹ Third, H. W. Sargent himself never used the word *seedling*, but instead called the plant "a sport of our native Hemlock."

Sport is an old-fashioned horticultural term that describes a mutant plant that obviously deviates from the normal type. In his 1874 article "Evergreens, Novelties and Dwarfs," Maxwell also uses the term "Sports of Nature" to describe various mutant conifers and points to the weeping hemlock sport found on "Mt. Hounes" as an example of "a real deformity" that became a "thing of beauty" after receiving proper horticultural treatment (high-grafting and staking).

Perhaps the most convincing bits of evidence for the theory that Sargent's weeping hemlock was derived from a single plant comes from the Burrow, Wood & Co. advertisement that referred to an "Original Tree" and from Carmen's 1877 statement that Sargent's tree at Wodenethe, "either from a layer or graft, was derived from the original tree of Mr. BURROW'S." Taken

together, all of these early references clearly suggest that Jefferson Horton's original discovery consisted of a single tree that he propagated by layering—the "single sport theory"—rather than the "multiple seedlings theory" proposed by C. S. Sargent some forty years after Horton's initial discovery. Indeed, Sargent's statement that "the dense low habit which is the charm of the original seedlings" implies a level of uniformity that is more characteristic of vegetatively propagated layers than a group of genetically distinct seedlings.²²

As I reported in *A Giant Among the Dwarfs*, there is considerable variation in the size and form of the oldest specimens of Sargent's weeping hemlock as well as considerable debate as to whether these differences are genetic or the result of horticultural practices.²³ The surprisingly heated debate about the merits of high-grafting among the horticulturists of the day make it clear that the different appearances of the original specimens are a reflection of their mode of propagation—layering versus grafting—and whether or not they were staked.²⁴

The Final Story

Putting all this information together, I can now present the most likely—and hopefully final—version of the Sargent's weeping hemlock story: Sometime in the 1850s, "an old farmer," Jefferson Horton, discovered a wild weeping hemlock growing on his property in Hortontown (Hopewell Junction), New York. The tree, which was rediscovered by A. B. Stout in 1937, was growing in its original wild location about twenty feet from the house and grocery store that Jefferson Horton's son Enoch had built in 1874. Sometime prior to 1861, John Burrow learned about Horton's weeping hemlock and obtained a layer, which he planted on his own property on Honness Mountain in Fishkill. Around the same time, Henry Winthrop Sargent also learned about the weeping hemlock and obtained a layer of it from either John Burrow or Jefferson Horton. The specimens that both men were growing were relatively small when J. R. Trumpy of Parsons & Sons Nursery visited Fishkill in 1861 looking for propagation material. After Burrow refused to sell him his tree, Trumpy visited Sargent who gave him some

scions, and he grafted these when he returned to Flushing. At some point, Sargent obtained at least three additional weeping hemlock layers from either his own tree or from Horton's tree. He planted one of them at General Joseph Howland's estate, Tioronda, in Matteawan, New York; gave a second to his cousin C. S. Sargent, who planted it on his estate, Holm Lea, in Brookline, Massachusetts, in 1871; and gave the third to his kinsman Horatio Hollis Hunnewell of Wellesley, Massachusetts.

Josiah Hoopes published the first description of the weeping hemlock in 1868. Frank J. Scott gave the tree its first Latin name, *Abies canadensis inverta*, in 1870, and later that year published the first proper description of Sargent's weeping hemlock under the name *Abies canadensis Sargenti*. Robert B. Parsons & Co. of Flushing, New York, was the first nursery to offer the tree for sale in the fall of 1874, and his brother, Samuel, started writing about it in horticultural magazines around the same time. Burrow, Wood & Co., Mt. Hanas Nursery of Fishkill, began offering grafts of the "Original Tree"—Jefferson Horton's tree—in January 1875 under the name *Abies canadensis Pendula*, the first time this name was applied to the plant.

At least four specimens of Sargent's weeping hemlock were put on public display at the Centennial Exposition in Philadelphia in 1876 and were later planted out on the grounds of Fairmount Park. Elbert Carmen published the first illustration of Sargent's weeping hemlock in 1877, followed a few months later by a second one from George Thurber, and a third from S. B. Parsons in 1887. In 1937, Arlow B. Stout rediscovered Jefferson Horton's specimen of Sargent's weeping hemlock in Hortontown, about four miles southeast of Fishkill and eight miles from Beacon.

The convoluted story of Sargent's weeping hemlock—which should by rights be called Horton's weeping hemlock—is a cautionary tale about the confusion and infighting that often surrounds the issue of who gets credit for the discovery and introduction of a new plant as well as the myth-making that sets in once the facts have been clouded by the passage of time.²⁵

Nomenclature

In 1983, I accepted Alfred Rehder's 1949 determination that the correct scientific name for Sargent's weeping hemlock was *Tsuga canadensis* forma *pendula*. I did this because of C. S. Sargent's assertion that the original discovery consisted of "several seedlings" found in the wild fit the technical requirements of a botanical *forma*.²⁶ Because I now know that the original specimens of Sargent's weeping hemlock were actually layers from a single plant, the tree should be reclassified as a horticultural cultivar.²⁷

In the light of this new information, the relevant question becomes what the "correct" cultivar name for Sargent's weeping hemlock should be rather than what rank it should be. According to Article 29.2 of the *International Code of Nomenclature of Cultivated Plants*,²⁸ "When there are two or more names in use for the same cultivar ... the name that best preserves existing use is to be chosen as the accepted name by the appropriate International Registration Authority without regard to any rank in which those epithets might have been established or to the principle of priority." Scott's first epithet, *inverta*, from 1870 is clearly out of the running given that it lacked a proper description and it last appeared in print in 1876. Scott's second 1870 proposal, *Sargenti*, was properly described and is in wide use today as 'Sargentii'.²⁹ *Pendula* came late to the party, first appearing in 1875, and seems to be used more commonly today than *Sargenti*. In 1983, I chose to use the name *pendula* because I thought that the tree was a botanical *forma* and the German botanist Beissner, in 1887, was the first author to describe Sargent's weeping hemlock as a *forma* with the name *pendula*. Now that I know Sargent's weeping hemlock is actually a cultivar, I prefer using the name 'Sargentii' because it helps clarify the distinction between the two categories. I also like the name 'Sargentii' because it has temporal priority and reflects the plant's common name, but it's up to the International Registrar to make the final determination.

Current Status of Notable Sargent's Weeping Hemlocks

HORTONTOWN: Based on branch core data, the single-trunked Horton hemlock was at least 5 feet tall in 1860, making this the oldest known specimen of Sargent's weeping hemlock. In 1880, H. W. Sargent said the tree was 8 feet tall by 15 to 20 feet across. In 1980, it was 18.3 feet tall by 31 feet across with a trunk diameter of 24.5 inches. When I visited the tree in December 2018, it was completely dead but still standing with a trunk diameter of 28.3 inches. A picture of the tree on the internet from spring 2015—when the house at 339 Hortontown Road, Hopewell Junction, New York, was put up for sale—shows it to be in poor condition. In a Google Earth image of the site on April 16, 2016, the tree appears dead.

WODENETHE: Henry Winthrop Sargent purchased the twenty-two-acre parcel of land that became Wodenethe in 1841 and described the evolution of its landscape in the supplement to the sixth edition of Andrew Jackson Downing's *Theory and Practice of Landscape Gardening*, published in 1859. Sargent died in 1882, but the property remained in the family until 1921, when the house and grounds were sold and incorporated it into the Craig House Sanatorium. In 1955, Wodenethe was sold to a developer. The house was burned down as part of a fire-training session by the Beacon Engine Company in order to prepare the land for subdivision and housing construction. The first reference to a weeping hemlock at Wodenethe came in 1868 from Hoopes, and the last came from Maxwell, in 1874, who called it "one of the most interesting and ornamental plants in his entire collection." As for the question of when Sargent's tree might have died, it is worth noting that Charles Sprague Sargent made no mention of a weeping hemlock in the article he wrote about Wodenethe in 1897.



The Hortontown weeping hemlock 1981 (above) and standing dead in 2018. Note the Taconic Parkway in the background.

TIORONDA: In 1859, Joseph Howland purchased sixty-five acres of land as a site for his country estate, Tioronda, in the village of Matteawan, on the other side of Fishkill Creek from the home of H. W. Sargent. Construction of the house was completed in 1861 while Howland was off fighting the Civil War. He returned home with the rank of brigadier general. Sargent oversaw the laying out of the grounds for Howland, and at some point, he planted a layer from the original weeping hemlock near the entrance. Howland died in 1886, and his widow sold the estate in 1911. In 1915, the property was converted into America's first privately run psychiatric center and renamed

Craig House.³⁰ The facility closed its doors in 1999.³¹ The tree was heavily pruned in the late 1990s or early 2000s and treated for hemlock woolly adelgid (*Adelges tsugae*). In December 2018, the Tioronda specimen was 16 feet tall and 40 feet by 34 feet across and had four major trunks with basal diameters ranging from 16 to 29 inches.

HOLM LEA: H. W. Sargent also provided a weeping hemlock to his cousin Charles Sprague Sargent, who planted the specimen at Holm Lea, in Brookline, Massachusetts. According to the caption on the back of a May 1923 photo, located in the Arnold Arboretum archives, the tree was planted in 1871. When I measured it in 1980, it was 7.5 feet tall and 32.5 feet across with multiple trunks emerging from the ground. On February 23, 1984, the tree was destroyed by a fire of suspicious origin, perhaps set by some teenagers who were reported in the vicinity of the tree that night. Indeed, the tree had long been an attraction for neighborhood children who called it “The Fort” and often played beneath its pendant branches. The Arnold Arboretum collected a layer off of the Holm Lea tree in 1966, and the resulting plant (accession 655-66*A) is currently 7.6 feet tall and 17.3 by 15.5 feet across with a basal trunk diameter of 16 inches.

HUNNEWELL: H. W. Sargent described the making of Horatio Hollis Hunnewell’s estate in Wellesley, Massachusetts, in his 1859 supplement to the sixth edition of Downing’s book, in the same chapter that described the creation of Wodenethe. Hunnewell was married to Isabella Wells, H. W. Sargent’s first cousin, and through this connection was also related to C. S. Sargent. Some people have suggested that a large weeping hemlock in the Hun-

The Tioronda weeping hemlock in 1980 and December 2018 (top two). The Holm Lea weeping hemlock in 1980 and in 1984, with Gus Kelley, after the fire.



H. G. MAYER, ARNOLD ARBORETUM ARCHIVES



A. B. STOUT, ARNOLD ARBORETUM ARCHIVES



newell Pinetum might have been one of H. W. Sargent's original plants because of its multistemmed form, but it does not appear on an 1895 map of the collection. In 1923, Murray Hornibrook—on C. S. Sargent's authority—announced that one of the original seedlings went to Hunnewell but that it had died. In 2012, the estate's longtime horticulturist, David Dusenbury, uncovered a reference from the late 1920s among the unpublished writings of Theophilus D. Hatfield, who worked at the Hunnewell estate from 1887 until 1929: "The original plant [of Sargent's weeping hemlock] I believe is still on the late professor Sargent's estate in Brookline. Our plant, of course, is a graft, and indeed a very handsome specimen, admired by all visitors." As of 2019, the tree measured 22 feet tall and 47.5 feet by 42.2 feet across; it has four large trunks with breast-height diameters ranging from 13 to 27 inches.

FAIRMOUNT PARK: Following the end of the 1876 Centennial Exposition in Philadelphia, at least four weeping hemlocks were sold to the Fairmount Park Commission and planted near Horticultural Hall, on a site that had formerly been occupied by the Women's Pavilion. In 1896, Joseph Meehan reported that the four trees were "a source of much interest to the numerous visitors to the park. Having been grown for twenty years, they excel [sic] probably any other specimens in these parts. They are about six feet high and eight feet in width." In 1939, they ranged in size from 12 to 14 feet tall. When I visited the park in 1994, all four trees were still alive, and the largest specimen measured between 34.5 feet tall and 40 by 50 feet across with a basal trunk diameter of 31 inches. In November 2018, only this tree and one other were still alive.

The Hunnewell weeping hemlock in 1930 and 2010 (top two). The Fairmount Park weeping hemlocks in 1938 and one in November 2018.

ARNOLD ARBORETUM: A single-stemmed, grafted specimen (accession 1514-2*A) was propagated in 1881 from scions taken from a grafted plant received from S. B. Parsons & Sons, Kissena Nurseries in 1880. In 1980, a large branch with sixty-six growth rings was removed from the tree 6 feet up the stem, indicating that it was at least this tall in 1913. As of December 2018, the tree was 16 feet tall by 25 feet across with a trunk diameter at breast height of 19.4 inches; its trunk had a pronounced lean to it and structural roots near the base were protruding out from the ground.

LOVE LANE: Claiming to have found the largest anything is always a risky proposition, but with that caveat, the largest weeping hemlock I have seen is growing in a lawn on a private estate in Weston, Massachusetts. It was planted in the early 1900s on property owned by John G. Freeman and his wife, Caroline Case, the sister of Marian Case, who established Hillcrest Farms at the Case Estates.³² In 1980, this giant, multistemmed specimen of Sargent's weeping hemlock was 19 feet tall and 47 feet by 43 feet wide. In 2018, it was 22 feet tall and 79 feet by 70 feet across with eight huge, ribbon-shaped stems with diameters ranging between 20 and 32 inches. It's a truly magnificent tree, but the main trunk was starting to split apart and one of its upper limbs had broken, leaving a large hole in the once closed canopy.



The Arnold Arboretum's oldest weeping hemlock (1514-2*A) in September 1945 and June 2019 (top two). The Sargent's weeping hemlock on Love Lane in 2019 and, showing the branching structure, in 2016.

DEDICATION

This article is dedicated to the memory of Gus Kelley of Little Compton, Rhode Island, who first inspired me to take up the study of Sargent's weeping hemlock.

Endnotes

- ¹ Jenkins, 1946
- ² According to *A Book of the United States*, edited by G. Mellen and published in 1838: "The Highlands of the Hudson, or Fishkill Mountains, which first appear about forty miles from New York, are marked for their sublimity and grandeur, and interesting from their connection with many great events of the revolution. This chain is sixteen miles in width, and extends twenty miles along both sides of the Hudson."
- ³ Smith (1856) paints a vivid picture of Wodenethe in all its glory, and Spingarn (1937) documents the significant role that Sargent played in the history of American horticulture not only as a writer and plant collector but also a horticultural innovator. He was one of the first Americans to use a lawn mower and marveled, in 1855, at how it could do in eight hours what "formerly occupied two men and a boy the better part of nine days to do, and infinitely better too."
- ⁴ Sargent's ideas about gardening were heavily influenced by the writings of the British horticulturist J.C. Loudon. According to Spingarn (1937), "Loudon's 'gardenesque style' became Sargent's ideal, as it became that of the Arnold Arboretum—in other words, an arboretum landscaped like a park-like English estate."
- ⁵ The earliest scientific name for the eastern hemlock, also known as the hemlock fir or hemlock spruce, was *Pinus canadensis*, bestowed by Linnaeus in 1763. André Michaux changed it to *Abies canadensis* in 1796, and in 1855, the French botanist L. Carrière created the genus *Tsuga* to encompass all hemlocks and assigned the name *Tsuga canadensis* to the eastern hemlock, a change that was accepted slowly.
- ⁶ Apparently Honness Mountain is a corruption of the Dutch term *hondenneus*, meaning "dog's nose."
- ⁷ Plans VIII, IX, XIII, XIV, XV, XVI, and XVII also feature "Sargent's hemlock, *Abies canadensis inverta*."
- ⁸ Williams, 1872; Hoopes, 1875
- ⁹ Jean Rudolph Trumpy was born in Glarus, Switzerland, in 1830 and died on May 21, 1913; he worked in the gardens of the King of Bavaria before coming to America in 1856 (A.F.F., 1913).
- ¹⁰ The illustration that Carmen used with his article is of a specimen at Parsons's Nursery and first appeared in an article that S.B. Parsons wrote for *The Garden* in 1887; it also appeared in an unsigned 1887 article in the *Horticultural Art Journal*, volume 2, page 72.
- ¹¹ T. Meehan, 1876
- ¹² Rothrock, 1880; Jenkins, 1933
- ¹³ See also the 1910 obituary of Isaac C. Wood, published in *Horticulture*, 12(5): 156.
- ¹⁴ This advertisement constitutes the first use of the epithet *Pendula* to describe Sargent's weeping hemlock.
- ¹⁵ The article can be ascribed to Wilson due to the fact that he reprinted much the same information—including the mistakes and much of the same phrasing—in an article he wrote for *The Garden Magazine* in 1920.
- ¹⁶ Horatio Hollis Hunnewell was married to Isabella Wells, H.W. Sargent's first cousin (Sutton, 1970).
- ¹⁷ Sallie Sypher, deputy historian for Putnam County, located the Horton Claim Deed (executed on June 10, 1874) in *Liber 67*, pp. 21–22 at the Putnam County Clerk's Office.
- ¹⁸ Del Tredici, 2017
- ¹⁹ Del Tredici and Orwig, 2017
- ²⁰ Van Heiningen established South Wilton Nurseries in Wilton, Connecticut, in the early 1900s.
- ²¹ See Hoopes (1868) and Wells (1955) for a description of layering in nursery practice.
- ²² It is tempting to speculate that the tendency of Sargent's weeping hemlock to "come true" from seed (first observed in 1906) provides evidence for Sargent's seedling theory (Jenkins, 1935; Stout, 1939; Del Tredici, 1983). The parsimony principle (Occam's Razor), however, suggests that propagating six layers off one parent tree is more likely than finding six identical seedlings growing in a single location.
- ²³ Bean, 1914; Stout, 1939; Swartley, 1984
- ²⁴ My own research at the Arnold Arboretum demonstrated that, after four years, grafted plants of two dwarf hemlock clones, 'Nana' and 'Cole's Prostrate', were significantly larger and broader than cutting-grown plants on their own roots (Del Tredici, 1985). Presumably these differences were due to the fact that a grafted plant is "bi-genomic," with a normal root system and a dwarf top, while both the roots and the shoots of a cutting-grown plant are derived from the same dwarf genome. As regards staking, the early propagators knew that tying the leader to a stake dramatically increases both a plant's height and the speed of its growth.
- ²⁵ In *St. George and the Pygmies* (1984), I describe the tangled story of *Tsuga canadensis* 'Minuta', which bears remarkable similarities to the story of Sargent's weeping hemlock.
- ²⁶ According to Davis and Haywood (1965), the rank of *forma* (abbreviated *f.*) is the lowest unit of botanical classification and describes a single-character variation with a random distribution within a natural plant population. While horticultural taxonomy still uses the *forma* designation, it has fallen out of favor in botanical taxonomy.
- ²⁷ In 1953, the horticultural concept of the *cultivar* was introduced as the preferred way to describe plants that have undergone some degree of human selection. Over time, the cultivar name in single quotes has largely

supplanted the use of the botanical concept of *forma* to describe horticultural selections. With woody plants, the cultivar name is typically, but not always, used to describe asexually propagated clones.

- ²⁸ Brickell et al., 2016
- ²⁹ According to the rules of nomenclature, when a plant name is derived from a person's name that ends in a consonant, the letters *ii* are added to it.
- ³⁰ Craig House hosted many famous "guests," including F. Scott Fitzgerald's wife, Zelda; Frances Seymour, the wife of Henry Fonda and mother of Jane Fonda; Rosemary Kennedy, after her catastrophic lobotomy; and the actors Jackie Gleason and Marilyn Monroe.
- ³¹ In 1933, Jenkins describes meeting Clarence Slocum, who initially managed Craig House. I met with his son Jonathan on several occasions in the 1980s, and on my last visit, he gave me the remains of H. W. Sargent's library as a donation to the Arnold Arboretum Archives.
- ³² According to the "Love Lane Historical Narrative" on the Town of Weston website, the landscape plan for the Freeman/Paine house at 55 Love Lane was drawn up in 1901. Retrieved from <https://www.weston.org/687/Love-Lane-Area-Historical-Narrative>
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