

Sober Chestnut Farm: Coleman Kimball Sober was the owner and innovator of the Sober Chestnut Stock Farm that created his chestnut empire reign from 1896 until 1913. Photo courtesy of Dr. William Lord

The Paragon Chestnut

PEDIGREE AND HISTORY

By Dr. William Lord, Pennsylvania Chapter and Honorary Board of Directors

The Paragon chestnut was the established favorite in eastern America among those engaged in raising chestnuts for food before it was eliminated by the chestnut blight. First noted in New York City in 1904, this fatal fungus spread rapidly in all directions throughout the Appalachian range of the American chestnut and within five decades, eliminated it as a timber tree. The Paragon, believed by most current authorities, to be a hybrid of the American and European chestnuts, was eliminated with equal finality.

There are four chestnut tree species that have been used for nut production: American, European, Japanese, and Chinese chestnuts. Prior to the blight, the European and the Japanese species were preferred, primarily due to a larger sized nut. The sweet but small nut producing American was used as stock for grafts and for producing hybrids, primarily with the European. "The Chinese chestnut, *Castanea mollissima*, was first successfully introduced into the United States in 1903 and the first distributed 1907" [J. W. McKay and F. H. Berry, Northern Nut Growers Association Annual Report # 51, 1960, pp 31-36] It was not a component of American nut orchards before the blight. The Chinese and the Japanese, in contrast to the European and American, are blight resistant and their progeny plus some Asiatic-European hybrids now produce most of the current nut harvest in America.

The Paragon nut orchards are gone but not forgotten, particularly by the members of the Pennsylvania Chapter of the American Chestnut Foundation. Our primary mission is to develop a blight resistant, timber type American chestnut and reestablish it in Appalachia. This is a work in progress in the initial stages of reforestation. Regarding the Paragon, we have an abiding interest in its history and pedigree. It is a Pennsylvania phenomenon. The productivity of the tree and the size and taste of its nut are legend. Scions grafted to American root stock produced nuts in two years. The delicious nuts grew three to five in the bur; the largest covered a silver dollar and most covered a half dollar. Just prior to the blight, Pennsylvania orchards were shipping nuts by the railroad car load. Regarding Paragon history and pedigree, I have availed the internet for commentary by orchardists and scientists that worked with and knew the Paragon. My personal interest relates to its pedigree. Was it a European chestnut or a European/American hybrid? Here's the evidence, you decide.

Paragon chestnut:
Illustration by Julius Bien & Co., Lith., N.Y.; Courtesy of Division of Illustrations, U.S. Department of Agriculture.



William L. Schaffer, 1809-1884, a wealthy businessman and horticulturist obtained a chestnut seed from a friend and planted it on his estate in Germantown, a residential area of Philadelphia. The date is not certain, but a single reference places the time in the late 1840's. [G. H. Powell, see below] The chestnut was just one of many plants that Schaffer grew. He was most interested in fruit trees. But he soon became aware that his chestnut was something to be proud of. It produced large, sweet nuts in an enormous burr at a very early age. In common with early producers, it did not grow very tall. Its energy was programmed for reproduction rather than growth. Schaffer was the president of the Pennsylvania Horticultural Society the last 16 years of his life and in 1879 he entered his prodigy tree in a Society competition. As reported in the hand-written Society minutes, "Your Committee also notice [sic] a small bunch of the American Chestnut tree, containing 6 clusters of 3 burs each of very large sized fruit. This productive variety should be more generally planted. It was grown by President Schaffer." The term, "American Chestnut" is not correct but according to his colleague and neighbor, Thomas Meehan, 1826-1901, the nut given to Schaffer was represented as an American chestnut. Schaffer did not question its identity and referred to his tree as "The Great American."

Thomas Meehan was a prominent horticulturist of the 19th century. Born in England, he came to America in 1848 following a two-year stint at London's renowned Kew Gardens. He settled in the Germantown section of Philadelphia and there lived with his family the rest of his

All photos courtesy of USDA, and thanks to Alex Day.

life. "Meehan's researches in botany led to his being the editor of *The Gardener's Monthly* (1859-1888), and then of *Meehan's Monthly* (1891-1902), two horticultural journals with the largest circulation at that time. Meehan wrote his own agriculture columns for five newspapers."

In 1885, a year after Schaffer died, Meehan focused his attention on the origin of the Paragon, as published in his *Meehan's Monthly*. An unidentified "eminent authority," had appeared in print in an un-authoritative manner. Meehan set the matter straight. As a friend and fellow horticulturist of William Schaffer, he knew the origin of the Paragon. "'Origin of the Paragon chestnut', a paper by an eminent authority, on the origin and character of certain varieties of the Spanish chestnut has the following: - 'Paragon: origin uncertain,- said to have been raised from a foreign nut, in the garden of a gentleman residing in Philadelphia.' There need be no uncertainty in the history of this nut. It was raised by William L. Schaeffer, [sic] formerly president of the Giraud Bank of Philadelphia, and for a number of years the esteemed president of the Pennsylvania Horticultural Society. He had a fine farm and country seat at Mt. Airy, near Philadelphia. The nut was given to him by a friend, having been obtained from an American chestnut tree. It was evident to everyone familiar with the species of chestnut, that this was a mistake. Few species are more easily distinguished than the *Castanea vesca* [synonym of *C. sativa*] of Europe, and the *Castanea Americana* [synonym of *C. dentata*] of our country. Still, Mr. Schaeffer not being a botanist, and with full faith in the history of the nut as given by his friend who handed him the original, used to exhibit the fruit at the meetings of the Pennsylvania Horticultural Society as a product of the American species of chestnut. Notwithstanding all these accounts, Mr. H. M. Engle, of Marietta, Pennsylvania, was desirous of introducing it. He wrote to the writer of this paragraph to obtain for him grafts from Mr. Schaeffer. This was done, and the stock named by Mr. Engle the Paragon, and it was first sent out as a wonderful advancement in the development of the American chestnut. Everyone familiar with the different species has seen that this was a mistake, and it is no longer pressed in this line. It is a remarkable variety of the Spanish chestnut, and that is all. The grounds of Mr. Schaeffer have



Full view of the Sober Chestnut Grove Stock Farm in 1911.

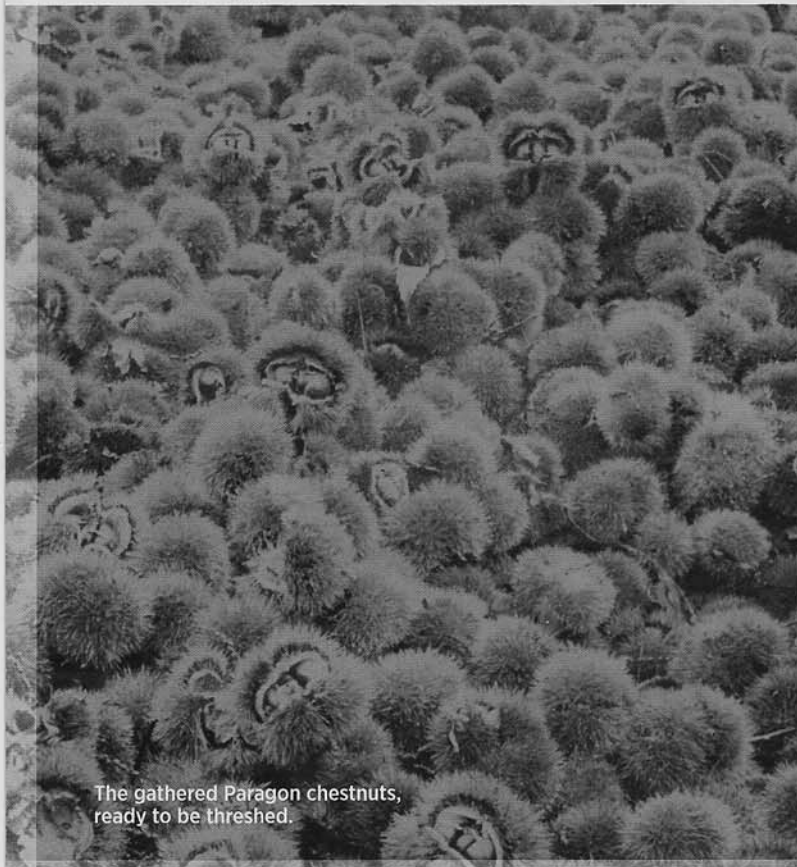
now been purchased for an Institute, and the original Paragon chestnut tree will undoubtedly be in the way of buildings ultimately, but up to the last year it was still standing there."

Growing chestnut as a nut crop was an expanding post Civil War enterprise, particularly in Pennsylvania, New Jersey, Delaware and portions of New York. Henry M. Engle, the family head of a thriving nursery in Marietta, Lancaster County, Pennsylvania, acquired scions from Schaffer circa 1875-78. He implemented a method to produce a chestnut grove wherein, "...the hillsides and slopes with [chestnut] timber will be cut and a proper portion of the sprouts grafted with choice varieties, and all the rest of the sprouts and underbrush destroyed. By such method, chestnut groves will be established without planting, and by their rapid growth will make bearing trees in a comparatively short time. This plan is not altogether speculative since 4-5 years of practical work of this kind justifies me in making such statements and, if I am not mistaken, the boom in chestnut culture will be by such methods." [Nut Culture in the United States embracing native and introduced species, USDA, 1896, compiled by W.P. Corsa., p 79.] By definition, orchards were planted and groves were produced by grafting scions onto on site stock.

The European chestnut was well established in the Philadelphia area as of the early 19th century. "Trees from

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The gathered Paragon chestnuts, ready to be threshed.

nuts imported from France and Spain have been fruiting for at least a half century near Philadelphia, Pa. and Wilmington, Del.....from nuts borne by these scattered trees, several trees of much promise have been grown, one of which, at least, the Paragon, shows some indication of partial American parentage. They are superior to the imported trees in hardiness and the nuts of some of them are of better quality than the imported nuts." [Ibid, p 26]

The above quoted source recognizes that some doubt existed about the Paragon pedigree. However in its description of the Paragon, it is described as European. "Paragon (Great American, pl 2) This is one of the best varieties of the European type. The nuts are large, measuring from 2-4 inches in circumference, more pubescent than either Numbo or Ridgeley [cultivars]. The skin is quite astringent. The quality is good, fully equal to the biggest of its species. The tree is hardy and productive in Lancaster County, Pa. The original tree was, according to Thomas Meehan, grown by W. L. Shaffer, of Germantown, Pa., from a nut of one of the Spanish chestnut trees then in bearing in the old gardens around Philadelphia. Mr. Shaffer supposed it to have 'some American blood,' but Mr. Meehan sees no evidence of this in either tree or fruit. The variety was introduced to the trade by H. M. Engle of Marietta, Pa., about 1888." [Ibid p 87]

As is apparent from the above quotation, some authorities did not agree with the confident declaration of Thomas Meehan that the Paragon was, ".....a remarkable variety of the Spanish chestnut, and that is all."

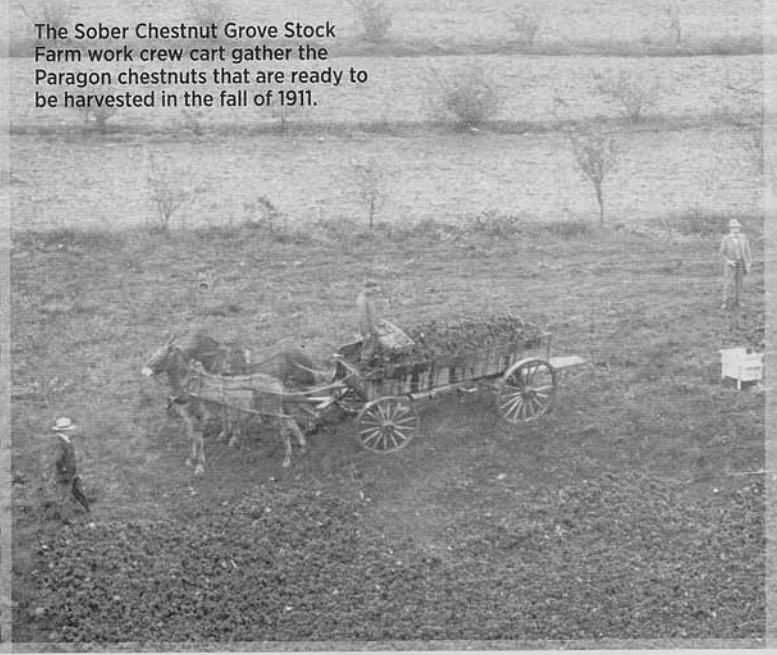
One careful skeptic was Andrew Fuller, a contemporary nut orchardist. His comment has a special bearing regarding a suggestion for proper recognition of Schaffer that never came to pass. "Mr. Andrew Fuller says of the Paragon Chestnut, in the *Nut Culturist*, 1896, 'Burs of immense size, often five inches and more in lateral diameter, distinctly flattened on the top, or cushion shape, spines an inch in length, widely and irregularly branching from a stout stem, springing from a thick, fleshy husk, the whole making an involucre or bur out of proportion to the nuts within; nuts of large size, slightly depressed at the top, and they are usually broader than long; shell very dark brown, slightly ridged, and covered with a fine - but not very conspicuous pubescence, kernel sweet, fine grained and of superior flavor for one of this species. Tree hardy, exceedingly precocious and productive when grafted on strong, healthy stock, a four year old tree being loaded. This is one of the best of its class; origin somewhat in doubt, but it is claimed that the late W. L. Shaffer, of Philadelphia raised it from a foreign nut, planted in his garden, and who some eighteen years or more ago, gave scions to H. M. Engle, of Marietta, Pennsylvania. [This article was published in 1896, evidence that Engle received scions from Schaffer around 1878] Mr. Engle has since propagated and disseminated this variety quite extensively under its present name, but should further investigation prove it to be distinct, and that it was raised by Mr. Shaffer, then it should certainly bear his name, and 'Paragon' become a synonym. No more appropriate monument could possibly be erected in honor of a distinguished horticulturist like the late Mr. Shaffer, than a chestnut tree, nor could his memory be perpetuated under more pleasant and agreeable surroundings than to have his name linked inseparably with such an excellent and valuable variety.'" [Chestnut Culture in Pennsylvania, , Nelson F. Davis, Pa. Dept. of Agri., Bltn # 123, 1904, pp 14-15.]

E. A. Sterling, of the New York Forest, Fish and Game Commission, does not weigh in on the Paragon pedigree, but he adds to Paragon history. Re Seventh Report, 1903, "Undoubtedly the best variety for general planting produced up to date is the Paragon. The tree is hardy within the range of the native chestnut, ripening moderately early; in Central Pennsylvania, about October 1st, and comes into bearing very young, and is exceedingly prolific. In fact, the young trees are such heavy bearers that it is almost a drawback to their value. They will exhaust their vitality and die, or lose their vigor of growth, if unrestrained. Paragon grafts take exceedingly well on American stocks, and have been known

Sober and work crew harvesting Paragon chestnuts in 1911.



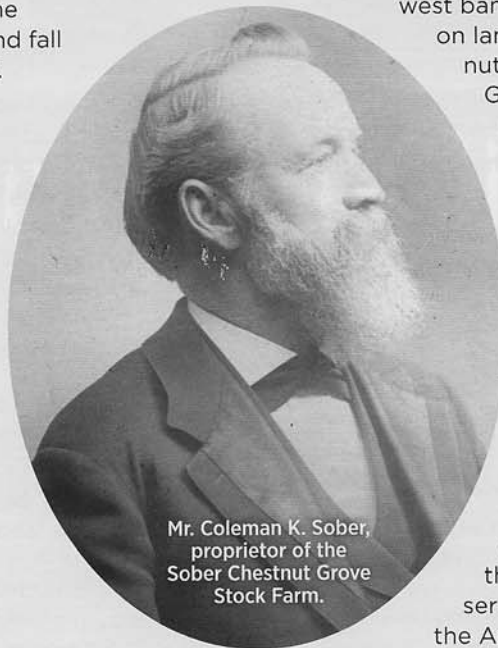
The Sober Chestnut Grove Stock Farm work crew cart gather the Paragon chestnuts that are ready to be harvested in the fall of 1911.



to grow well when grafted on red oak sprouts; while not free from insect attacks, the Paragon is much less affected by the weevil than are other varieties. A not serious reduction of its many good qualities is the tendency of the burs to remain closed and fall to the ground with the nuts still retained. They open readily, however, if spread in the sun; hence the only detriment is a slightly additional cost of harvesting. It saves, on the other hand, however, the loss and difficulty occasioned by picking the nuts from the grass and debris beneath the trees. For planting in this State (New York), the Paragon can be safely recommended above all others." [Ibid. p 15.]

G. H. Powell of the Delaware College Agricultural Experimental Station gave a thorough botanical description of the Paragon. He discussed the Paragon's pedigree and concluded on the side of Thomas Meehan. He acknowledges Meehan as the source of his Paragon history. The European mother tree is described and given a tie-in with George Washington.

"Bur immense, flattened, spines very long, branched, husk fleshy; nuts large, three or more in a bur, apex broad, depressed, 34 mm broad, 30 long, 23 thick, pubescent at tip, and slightly over two-thirds, dull dark brown, ridged, quality excellent, tree hardy, spreading, vigorous, foliage distinct, narrow, coarsely serrate, tapering gradually at the point, base narrow, subject to leaf blight; enormously productive, ripens at Parry, NJ Oct 10- 15.



Mr. Coleman K. Sober, proprietor of the Sober Chestnut Grove Stock Farm.

"Probably a seedling of a European chestnut, popularly supposed to have been planted by George Washington, [1732-99] standing at the first of this century on the west bank of the Schuylkill, above Philadelphia, on land owned by Richard Peters. The parent nut was obtained by the late W. L. Shaffer, Germantown, PA, and was planted there more than fifty years ago (exact date unknown) on land now occupied by the Deaf and Dumb Asylum. [This article was published 1899 dating the planting of the original Paragon in the late 1840's.] About 1875, the date H. M. Engle, Marietta, PA obtained grafts through Mr. Thomas Meehan and introduced the nut in the early eighties, first as *Great American*, from its supposed American origin, it being referred to the American type in its early references. Bailey, in 1891, (*Am. Garden*), classed it as an American from the tapering form, and broad, deep serrations of the leaf, which are similar to the American foliage.

"The form of the leaves alone support the supposed American origin of the 'Paragon' but the thickness of the foliage, which I have found a much less variable character than form, is distinctly European; the narrow base of the leaf is more European than American, and the low spreading tree is distinctly European. It is not unlikely that the parent nut resulted from American pollen on the European pistil, for the Americans and Europeans readily cross; or, what is equally probable, the form of the foliage may be a varietal variation from the type. I am personally inclined to the latter



The grove in winter with Mr. Sober standing among four and five year old chestnut trees.

view, as I find many gradations in form in the foliage of the European type, the same tree, as the 'Ridgely', or 'Styer' often producing leaves which vary from the abrupt to the narrow, long, tapering point.

"I am indebted to Mr. Thomas Meehan for the facts concerning the parentage and early history of the Paragon." [G. H. Powell, The 11th Annual Report, 1899, Delaware College Agricultural Experiment Station, p. 126. [Powell also wrote *The European and Japanese Chestnuts In The Eastern United States*, Delaware Agricultural Experiment Station, Bulletin 42, 1898. On page 18 he lists the Paragon as a European variety, along with the Numbo. It is important to note that Powell makes no reference to the Chinese chestnut.]

The acknowledgment by Powell to Meehan as an authority on Paragon history indicates his stature among contemporary horticulturists. This was evident in a tour guide on the rare and notable plants to be seen on Germantown estates published in 1904. The late Thomas Meehan is feted as the "Author of the greatest books upon our native flora, and the Nestor of American Horticulture and printer of Meehan's monthly." The tour guide stops at the site of the Paragon and describes it, as Meehan would, as a European chestnut, but apparently in the past tense, indicating that it had become a victim of new construction. "...the celebrated 'paragon' chestnut of William Schaeffer, a variety of Spanish chestnut (*Castanea vesca*) which originated on what is now the institute for the Deaf and Dumb grounds, and obtained wide celebrity." [Edwin C.

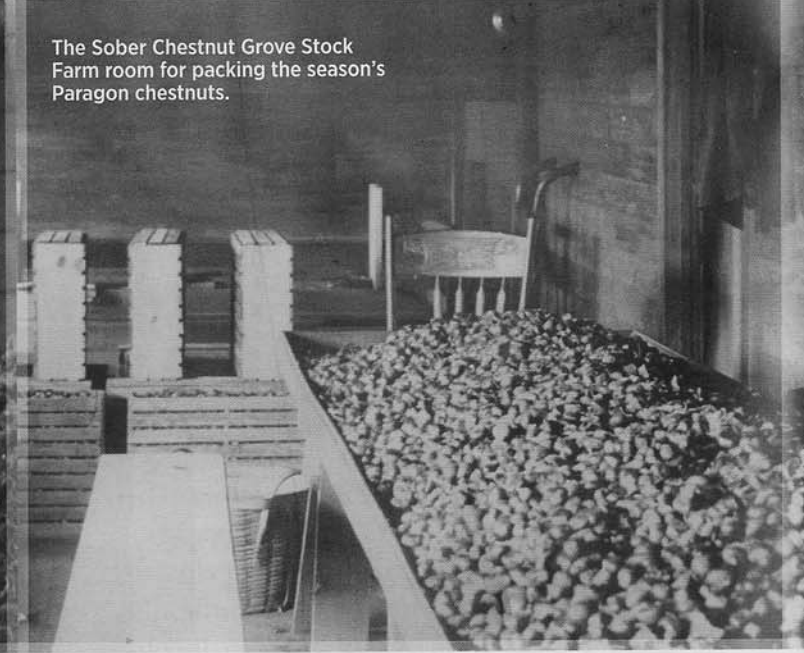
Jellot, Germantown, Old and New, It's Rare and Notable Plants, Germantown Independent Gazette, 1904, p 97]

The Paragon originated in Germantown, the home site of the Meehan nurseries. Why didn't Meehan propagate the Paragon? Presumably, he had other priorities. He was known for popularizing the Japanese maple and for the rediscovery of the pink dogwood. But he willingly intervened on behalf of Engle who wanted to graft Paragon scions to native chestnut stock and commence and expand chestnut enterprise. Engle, in turn, solved a problem for the man who became the greatest chestnut entrepreneur, Coleman K. Sober,

1842-1921. He worked his first 18 years on the family homestead in Northumberland County, north of Harrisburg. Coleman learned grafting from his father, particularly for their fruit trees. The chestnut, along with oak and pine, was common and one old tree near the home grew comparatively larger nuts. He asked his father to show him how to graft its scions. "Who ever heard of grafting chestnut?" And that was it. Years later a now wealthy Coleman bought the homestead, 400 plus acres of cut over mountain land, a dismal terrain of stumps, brush and worthless logs. Nonetheless, it was alive with chestnut sprouts. The old, "big nut" chestnut was still around and Coleman fulfilled his boyhood and grafted some scions onto chestnut sprouts. But the real answer for reclaiming so called worthless land lay with Engle. Coleman obtained Paragon scions, "...a cultivar of a European chestnut much favored by orchardists" and established the Chestnut Grove Stock Farm, implementing the Engle plan. In 1900 Sober perfected his own method of grafting and most of the bearing trees dated from that time. His grove was kept meticulously clean, guarded against fire, disease and parasites. The trees were pruned to maintain a low crown and thus aid in harvesting the nuts. Sober invented a threshing machine, saving his employees the time and pain of handling the spiny burs. Grass, rather than weeds, grew among his trees, kept mowed by cattle and sheep. Pigs fattened on nuts that escaped the harvesters. Chickens patrolled the grounds for injurious grubs and insects. In 1903 the grove covered 300 acres, growing 75,000 Paragon.



The workmen access the gathered Paragon chestnuts as they prepped to be processed and threshed.



The Sober Chestnut Grove Stock Farm room for packing the season's Paragon chestnuts.

[The 75,000 figure from Chestnut Importations into the US, S. L. Anagnostakis, Dec. '07, Page 4, Connecticut Agricultural Experiment Station]

The chestnut blight was a ruination. On February 21, 1912, Nelson F. Davis, a professor at Bucknell University and a friend and biographer of Sober, gave brave words on the survival of the Chestnut Grove Stock Farm at a blight control conference held in Harrisburg. "Mr. Sober and I have been fighting enemies for ten years.....In spite of the blight and in spite of everything, heexpects to see chestnut trees as long as he lives, and if we could come back in two years, I think we would find chestnut trees here." [The Pennsylvania Chestnut Blight Conference Proceedings, pp 83-99, as contained in the Publications of the Pennsylvania Chestnut Blight Commission, 1911-1913, produced by the Mann Library, Cornell Univ., Ithaca, N.Y., 1993.] Mr. Sober was out of the chestnut business the following year, deluged by the blight. Today the lone remnant of a palatial homestead is the hulking weatherboard gray chestnut barn. Creaking doors open to cobwebs and empty bins.

The blight also victimized the efforts of Walter van Fleet, 1857-1921. A man of many endeavors, he retired at 35 as a practicing physician. Plant breeding became a particular interest and in 1894 he dusted Paragon, "of the European species," with "...pollen from a native sweet chestnut bearing good sized nuts....The idea was to improve the quality of the Paragon nuts even at the expense of size." The seedlings, grown at Little Silver, N.J. grew rapidly and by 12 years, "the trees were shapely and bid fair to become extremely productive." Sadly the blight arrived about '07-'08. "The work of destruction was very rapid and by the third year all were hopelessly crippled...." [Walter van Fleet, Chestnut Work at Bell Experiment Plot, NNGA 11th Annual Meeting, 1920, pp 16-23]

There is a possibility that the Paragon may have survived as represented by the research and observations of two well known chestnut orchardists and historians, Greg Miller of Ohio and Michael Nave of California. The evidence is at least putative if not finite. As recalled by Greg during a phone conversation in May, 2010, he learned of a chestnut orchard called the Caha planting near Lincoln, Nebraska, while he was a student at Iowa State. He visited the site in the mid 1980's and located a tree he believes could be a Paragon. The planting was established in the early 1900's and contained several different trees including chestnut, hickory and walnut. The tree Greg saw was barely alive, about 20' tall with bushy branches down to the ground. He estimated it to be 60-70 years old and had died back and re-grown. There was no evidence of blight. He collected scions that he grafted at his Empire Chestnut Orchard in Carroll County, Ohio, and has maintained it as a cultivar. It does not survive blight infection, but is perpetuated by grafting scions. [empirechestnut@gotsky.com]

As told by Michael Nave by email, "There is a tree that is probably Paragon or a Paragon seedling, or Sober's Paragon, growing in an old chestnut orchard [about 5 acres?] planted between 1915 and 1920 in Brown's Valley, [Yuba County] California. The trees were planted by an engineer called Major Emil A. Hoepfner. He brought the best chestnut varieties he could find from around the U.S." [Michaelnave@comcast.net to wg.lord@comcast.net, 5-27-10.] Michael has propagated several scions. Michael and Greg have compared notes and believe the trees they describe may be the original Paragon. Each states that their Paragon is an American/European hybrid. In neither case is there any correspondence or record stating that the trees were Paragon.