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THE HUNNEWELL ARBORETUM 1852-1952

THE Hunnewell Arboretum in Wellesley, Massachusetts, is an excellent living example of the results of the painstaking, costly, time-consuming efforts of one family, carried out through three generations. It has contributed greatly to our present knowledge of horticulture in the United States. This year marks the one hundredth anniversary of the establishing of this great garden, so it is fitting at this time to record a little of its earlier history and accomplishments.

Started over a century ago by Horatio Hollis Hunnewell, the Hunnewell Arboretum was continued and increased by his son, Walter Hunnewell, and his grandson, Walter Hunnewell, Jr. Now, a century after the first trees were planted, the hundreds of diverse plants growing there make a wonderful display, appreciated by those interested in trees and shrubs who come to visit it from all over the world. The information gleaned from there and freely given to all who ask for it, has been used widely throughout the gardening areas of the northern United States. The one hundred years of interest and care which have gone into the building of this great privately owned arboretum have resulted in new plants, some of which are widely used throughout the northern United States today; in the accumulation of a tremendous amount of knowledge concerning the trees and shrubs of distant lands; and in a magnificent collection of conifer trees, some of the specimens being the oldest (and largest) in America today. However, only a small part of the story is told by the plants existing there now.

A century ago, little was known about the hardiness of many plants native to the Midwest and the Pacific Coast when grown in the northeastern United States. Naturally, the trees and shrubs from foreign lands presented many unknown problems also for at that time there were no publicly operated arboretums. Very few plants were coming from China and practically none from Japan. Consequently, private individuals interested in trying new plants had to use the costly

and time-consuming method of trial and error in attempting to grow hardy types. In the case of this arboretum, thousands of plants were brought from European nurseries and planted at Wellesley in an attempt to find those that would prove hardy there. Even a larger number were purchased from American sources. American horticulture owes much today to the valuable contributions this New England family has made to our knowledge of plants during the past century.

Horatio Hollis Hunnewell

Horatio Hollis Hunnewell, the original founder of this arboretum, was one of two children of Dr. Walter Hunnewell, a physician who lived in Watertown, Massachusetts (1769-1855), and practiced medicine there for sixty years. Young Horatio was born in Watertown, July 27, 1810, and like most of the other children was educated in the lower schools there. When he was fifteen years old an opportunity came for him to go to France and learn the banking business with Welles & Co. His parents wanted him to make the final decision himself, concerning this opening, and it did not take him long. Like many another youngster, it may have been the thrill of going to a foreign country, or just the desire for adventure, that appealed to him. In any event, he crossed the ocean alone at fifteen and entered into the banking house of Welles & Co., in Paris, later becoming a partner in the firm.

On December 24, 1835, he married Isabella Pratt Welles in France, the daughter of John Welles, one of the partners of the firm for which he worked. (The Welles family lived in what used to be called West Needham, Massachusetts. Later — 1862 — the name of the U.S. Post Office was changed to Wellesley by a vote of the town in respect to this family which had done much for the townspeople and in 1881 the town was set off from Needham). Because of the serious French financial crisis of 1837 and the very difficult times thereafter, it became necessary to sell what was left of Welles & Co. As a result, Horatio Hollis Hunnewell came back to America in 1839 without a cent in his pocket but with a rich experience in banking behind him. He found he had to start life again at the bottom of the business ladder, but, although he had no college education, he was a keen business man and was soon on his way to acquiring a considerable fortune. He was connected with railroads in the East and Midwest for many years. Also he became interested in Boston real estate and served on the boards of many manufacturing companies. In 1860 the banking firm of H. H. Hunnewell & Sons was established.

Early in his life, Mr. Hunnewell acquired the hobby of raising plants. In his diary he writes (dated November 1838): "I did not take special interest in gardening in those days, being absorbed in business; but I will mention a circumstance that shows I did begin very early in life to do so, for when I could not have been more than a dozen years old I planted some cherry-stones in my father's garden, which came up and I budded them before leaving home. These trees my father sold, and sent me over fifty dollars as the proceeds; so the first money I

ever earned was in the nursery business." Mrs. Hunnewell inherited 20 acres of land from her father in West Needham and it was this land that eventually served as the center about which he acquired considerably more as he prospered in business, so that by 1851 he owned 137 acres. His very early interest in plants, his wife's ties with her home in West Needham, and his business ability which made it possible for him to practice horticulture on a very large scale even in those days, are the three factors contributing to the establishing, maintaining and enlarging of the Hunnewell Arboretum as it is now known.

Other interests kept Mr. Hunnewell very busy, many of them having a horticultural bent. He served as Vice President of the Massachusetts Horticultural Society from 1864 to 1874, as well as serving on many of its committees. A few of his many gifts included the Town Hall, Library and ten acres of land to the Town of Wellesley; the present Administration Building of the Arnold Arboretum in Jamaica Plain.

The Arboretum

Chronologically, the present plantings did not start until the new house was built in 1852 (the house now occupied by Mr. Walter Hunnewell, Jr.), but actually Mr. Hunnewell became very interested in country life in 1843 with the making of the first improvements about the property.

By 1846, Mr. Hunnewell was importing large numbers of evergreens, fruit trees and forest trees from England and by 1856 he started importing Rhododendrons in large numbers, having been urged into it through the enthusiastic reports of his friend and relative H. W. Sargent. Mr. Sargent returned from a trip to England and had been impressed with the universal use of rhododendrons throughout that country and their good looks everywhere they were grown. Three years later Mr. Hunnewell began introducing azaleas as well.

By 1847, 2,060 trees were imported from England and planted in his nursery. These included: *Abies*, *Acer*, *Aucuba*, *Berberis*, *Betula*, *Buxus*, *Cedrus*, *Crataegus*, *Fagus*, *Ilex*, *Laburnum*, *Larix*, *Populus*, *Picea*, *Pinus*, *Quercus*, *Sorbus*, *Tilia*, *Taxus*, *Ulmus* and *Ulex* species.

Some of these died later from poor conditions in transportation and lack of winter hardiness. It was about this time that the family definitely decided to pursue the country life and began enlarging upon the idea of planting, improving the soil, building the stone wall along Washington Street (1846), buying new tracts of land and eventually by building the house in 1852, overlooking Bullard's Pond, now called Lake Waban.

Mr. Hunnewell was able to do things on a large scale. In 1847, he noted that he raised some apple seedlings and budded 533 trees. Also in this same year he noted he had planted 1,922 trees, including: 591 evergreens, mostly firs, white pines and a few Norway spruce; 637 forest trees of a great many kinds, among them spruces, maples, ashes, elms, horsechestnuts, firs, mountain ash, *Ailanthus*, larches, chestnuts (Spanish and American), catalpas, magnolias, lindens, alders,

butternuts and acacias; 290 peach trees; and 404 apples, pears, cherries, etc.

In addition, there were 4,000 seedling trees in the nurseries, some of which were "of good size" according to his diary. This was a sizeable accumulation of woody plants from which to select specimens for planting about the estate.

When Mr. Hunnewell moved into the new house in 1852 (the conservatory was added in 1866) very little had been done to improve the land adjacent to the house. The lawn was an old pasture almost entirely "run out," having been neglected for many years. The only specimen tree on the place at that time was a white oak which is still growing in excellent condition. However, he immediately began to change this. It was not long before he had to find places for some of the plants in his ever increasing nursery. Continual notes were made in his diaries concerning the plantings that he made from 1856 on.

There is also an almost continual record of changes, enlargements and additions to the greenhouses and wintering pits. There was an orangery, grapery, and orchid house, and some of these have been continued to the present time. When the decision was made, shortly after 1902, to do away with wintering so many tender plants in tubs, naturally some of the pits were abandoned.

As time went on, and newer importations of plants were made from western North America and abroad, the Hunnewell Arboretum became the outstanding garden of its kind in New England if not the entire eastern United States. It was here that hundreds of visitors came to see the native and exotic plants that they could not see or study elsewhere. Later, when the Arnold Arboretum was established in 1872, Charles Sprague Sargent, the young director, familiarized himself with the plantings of the Hunnewell Arboretum. It was undoubtedly here that he learned much about the hardiness of certain plants that had never been tried elsewhere, and also gained much information concerning their culture and propagation.

Mr. Hunnewell was fortunate in being able to import plants from abroad long before the restrictions concerning soil about the roots. Because of this, he was able to receive larger plants and, all in all, had reasonably good success with their survival on arrival here. The majority of all his rhododendrons he noted (1894) came from the firm of Anthony Waterer and Sons, Woking, England. Other plants were received from Kew Gardens, Van Houtte, Reuthe (in England) and many others. Prominent European horticulturists and botanists were continually visiting his place, for, in the early days, it was the only meritorious collection of evergreen plants in the eastern United States. In fact, Charles S. Sargent wrote in *Garden and Forest* (1892) that it was "unsurpassed in the number of species and varieties of these trees that it contains and in the size and beauty of individual specimens."

In the later years, the Hunnewell Arboretum began receiving seeds and plants from the Arnold Arboretum. Jackson Dawson, Charles S. Sargent, Ernest H. Wilson and William H. Judd were continually giving plants. The Hunnewells

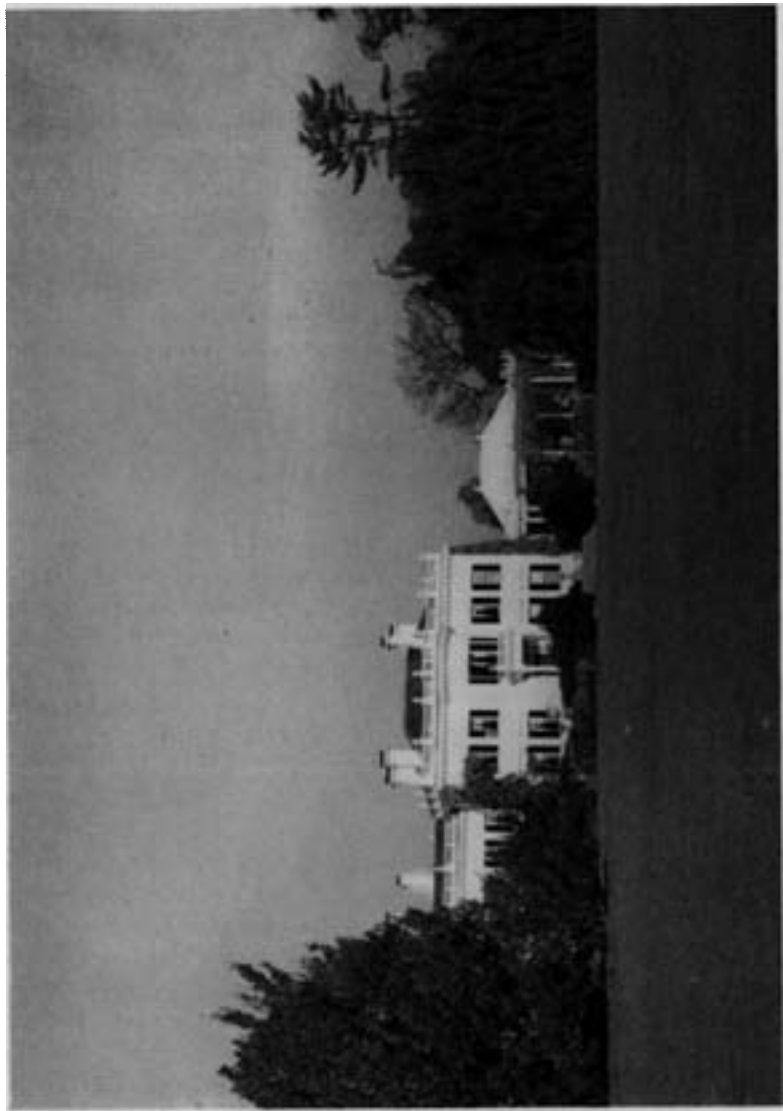


PLATE XIII

The main house, completed in 1852, with *Liriodendron tulipifera* on the left and *Fagus sylvatica pendula* on the right. Both these trees are nearly one hundred years old and the branches have taken root where they have rested on the ground.

contributed to several of the expeditions made by E. H. Wilson, so that when the seeds from these expeditions were distributed, the Hunnewell Arboretum was able to grow seedlings as quickly as the Arnold Arboretum. As a result, many of the specimens now living which resulted from these expeditions, are at their best in the Hunnewell Arboretum, and in fact are among the oldest, if not the oldest, in North America.

Walter Hunnewell, Sr.

When Walter Hunnewell, Sr. inherited the Arboretum in 1902, he gradually began to make changes. This was in the day when station agents along the railroad were still spelling out the names of the stations with bedding plants. Walter Hunnewell was less interested in tender plants, feeling that to be worth while here in New England, a plant should be perfectly winter hardy. As a result, the tender plants that had been brought out to the garden in tubs for so many years, later to be wintered over in pit houses, were gradually discarded.

Deciduous plants were seldom a feature. Rather, time, labor and interest were spent on the evergreens. Today there are still many beautiful deciduous trees and shrubs on the grounds, but the evergreens, always given the preference in care and space, are the featured attractions. From 1902 until the present the area of the arboretum and grounds has remained about 40 acres.

Mr. Hunnewell's diary contains many notes from 1915 to 1921 concerning the hardiness of plants and the weather conditions responsible for certain plant reactions. He was not without his troubles as far as growing plants were concerned for in 1915 he noted that serious rhododendron injury that spring was due to a bad drought the preceding autumn. Gypsy moth was noted in 1915 and the first time a lilac "blight" hit the lilacs was in 1921. This disease has been prevalent in the Arnold Arboretum in the rainy spring of 1952. Rhododendron lace fly is mentioned as being completely absent in 1915, resulting in excellent plant growth.

Some of the weather notes are interesting. For instance, in July 1915, there was nine inches of rain, the heaviest in forty years. The winter of 1915-16 produced a snowfall of eighty inches with eight inches of it coming on April 28. The winter of 1917-18 was, in Mr. Hunnewell's words, "the most extraordinary I can remember in my life time. Between December 22nd and February 5th, we have had only six days during which the thermometer has been over 32 degrees for an instant." Also a heavy frost occurred on the night of June 21 killing all vegetables in low spots but the Hunnewell vegetables were fortunately saved by the continual operation of the Skinner irrigation system. Many hemlocks and oaks were badly injured or killed this same winter. A large tree of *Pinus lambertiana* was killed outright. *Leucothoe catesbaei* and *Pieris japonica* were badly injured as well as some of the native red cedars. It was one of the most severe winters on record from the standpoint of plant injury, but many of the plants killed to the ground, made a rapid recovery, especially the azaleas.

In February 1920, he notes that the depth of snow on the ground in Wellesley was 59.7 inches, a heavy enough layer to injure and break the branches of many rhododendrons. The reading of these notes and records proves most interesting, adding to our knowledge of the plants which are on the borderline of hardiness here in New England.

Walter Hunnewell, Jr.

Mr. Walter Hunnewell, Jr., the present owner, inherited the arboretum on the death of his father in 1921 and has persistently carried out the precepts of his father and grandfather. He has added many plants to the collections, and has kept the pinetum open to the public and especially to the students of Wellesley College (which borders the grounds). He has continued the generous policy of always giving specific information concerning his plants and his experiences with them, to the many who are continually seeking information there. Interesting hybrids have arisen in this collection and propagating material has been distributed.

He, too, has been particularly interested in the Pinetum and in the rhododendrons, and has recently been especially persevering in his efforts to promote good growth among the hundreds of the older rhododendrons. He has been a Trustee of the Massachusetts Horticultural Society since 1925 and has served as Vice President and as Treasurer of that organization. He has also served long and faithfully on many of its important committees and at the same time has kept an active interest in many other horticultural organizations. His continued efforts to keep the plants of the arboretum in good condition, to add new species and varieties where possible, to continue experimentation with their culture, makes this collection one of the outstanding private collections of conifers and rhododendrons in America today.

The Gardeners

Right here a word of praise must be made to the three gardeners responsible for the maintenance of this collection over the first century of its operation. Mr. F. L. Harris was the first head gardener, coming to the employ of Mr. H. H. Hunnewell about 1854. Continuing after that until he retired in 1900, he was in charge of the arboretum and greenhouses, and died three years later at the age of 80. It was Mr. Hunnewell who had the vision of what to plant and where to plant, but undoubtedly Mr. Harris contributed greatly to the success of the arboretum as a whole from his years of practical knowledge of growing plants.

Mr. Theophilus D. Hatfield was employed by Walter Hunnewell, Sr., on his place adjacent to his father's for thirteen years prior to 1900. In that year, Mr. H. H. Hunnewell, knowing that his son Walter would eventually inherit the arboretum, took Mr. Hatfield to "break him in." Consequently, in 1902, when Mr. H. H. Hunnewell died, Mr. Hatfield had already become well acquainted with all the plants. Trained in Kew Gardens, England, he had a rich and practical background. He was continually seeking new information and contributed

many articles to the gardening and horticultural magazines of the times. Some of the plants originating in this arboretum were the results of this keen interest and knowledge. The Hunnewells were indeed fortunate in having T. D. Hatfield to serve them until his death in 1929.

The third superintendent was John Ellis, another graduate of Kew Gardens, who came in 1930 and is the present superintendent. Mr. Ellis also is a great horticulturist and brings to the arboretum a great knowledge of growing plants. His knowledge and experience is respected and frequently sought by all who are interested in growing rhododendrons and coniferous plants in New England.

Topiary Garden

Mr. H. H. Hunnewell started what he termed the "Italian Garden" in 1851, described by Downing in his "Landscape Gardening" in 1858. This was a series of evergreen trees, planted on a two acre bank by the lake, which were clipped and pruned in special ways, similar to what was done in certain Italian gardens of those times. Once there were 200 trees here. The steep bank rose 75 feet in a very narrow space, and Mr. Hunnewell constructed a series of seven terraces. He always felt that this treatment and type of planting was the best he could have possibly made to utilize the space in an interesting manner, while at the same time not cluttering up the beautiful view of the lake.

The disadvantages of growing these plants unnaturally were known to him, of course, but it has always been of great interest to visitors. It is the oldest topiary garden in America today and one of the very few where the effects of this type of pruning can be observed on evergreens.

When they grew well, the trees used to be clipped twice a year. T. D. Hatfield records that it was frequently difficult to keep the plants in good condition and that frequent replacements had to be made. However, in the time that he was there (1902-1928) it was the part of the estate that changed the least. Completed in 1859, Mr. Hunnewell noted in his diary that during the next twenty years, nothing of importance had occurred concerning it. In 1898 the following trees were growing there: 34 *Chamaecyparis pisifera* and vars.; 8 *Fagus* sp.; 17 *Juniperus virginiana*; 10 *Larix decidua*; 8 *Picea abies*; 30 *Pinus strobus*; 32 *Thuja occidentalis*; 25 *Tsuga canadensis*.

Many of these are still growing. Additional species like *Taxus cuspidata* were added later. This whole project was really an innovation on Mr. Hunnewell's part for he had to use mostly at the beginning, plants native to North America. In Europe the topiary was done chiefly with English Yew and other native European plants, but he could not purchase European plants sufficiently large to make an initial planting worthwhile and some of these species would not have proved hardy anyway.

Rhododendrons and Azaleas

Apparently it was in 1856 that Mr. H. H. Hunnewell first began importing



PLATE XIV
The Topiary Garden borders Lake Waban.

rhododendrons in large numbers, after being interested in these plants by H. W. Sargent, his friend and relative. Mr. Sargent returned from a trip to England very enthusiastic about the growth and universal use of rhododendrons in that country. Three years later Mr. Hunnewell also began collecting azaleas. His enthusiasm for these plants increased with the numbers of specimens that he purchased from abroad, and it was not long before his plantings of rhododendrons and azaleas became one of the outstanding spring shows in New England. He wrote in his diary: "It is my opinion that the Rhododendron is the most ornamental shrub we can grow in our climate and so I give it a most decided preference over all others. Some persons may prefer the lilacs which we all admit have much to recommend them, but how is it when they are not in flower, which is a large portion of the year? Are they not an eyesore, rather than an ornament in a very conspicuous place, such as this? Of this there is no doubt in my mind." Time and again mention is made of this excellent rhododendron display in the records of the Massachusetts Horticultural Society and gardening magazines of the times. He is to be given credit for pioneering in the culture of rhododendrons in North America.

Every variety it was possible to obtain from European nurseries, Mr. Hunnewell tried. Undoubtedly he should be given full credit for being the introducer of many varieties into North America from abroad. Unfortunately his earlier records do not contain many specific notes to dates of introduction of specific varieties, but he was importing them in large numbers before others in this part of the world had come to realize their true ornamental value. Many varieties which were at first too tender for New England were tried over and over again in the hope they might be hardy. In fact, Mr. Hunnewell sensed that popular interest was so great in these plants that he wanted to do something more than just open his gardens at Wellesley to visitors. As a result, he is credited with staging the first Rhododendron Flower Show in America, on the Boston Common in 1873.

For years thereafter, the Hunnewells have taken many prizes in many shows for their excellent rhododendrons. Today, the plantings of these shrubs are still among the best and most colorful in New England. The Hunnewells deserve a great deal of credit for starting the interest in growing these valuable ornamental plants in the northern United States, as well as for growing them continually during the past century and learning so much about their hardiness and culture.

After the death of Mr. H. H. Hunnewell, his son became more and more interested in the plants which were completely hardy out of doors in New England's winter. As a result, the many tender rhododendrons which previously had been kept in tubs, moved into pits in the winter and out of doors in the late spring, were either sent away to the DuPont's at Kennett Square, Pennsylvania; to the Missouri Botanic Garden; to South Carolina, or left continually out of doors at Wellesley. Gradually, the really hardy ones became known.



PLATE XV

Rhododendrons have always been a prominent feature of the Hunnewell Arboretum.

Azaleas also interested Mr. H. H. Hunnewell at an early date, but many of the ones he imported from England were tender sorts which had to be placed in the pit house for winter. Some of the Ghent hybrids were imported as early as 1878. Walter Hunnewell became interested in the Ghent and Mollis hybrids, but T. D. Hatfield noted that by 1929, most of the Mollis types had disappeared because they were so susceptible to borer attack. There are still some excellent Ghent hybrids remaining.

Early in the twentieth century, the Hunnewells obtained some of the seeds of rhododendrons and azaleas collected by F. H. Wilson in China and Japan. At about this time, the azalea species which were being grown in the arboretum (in the order of their flowering) were: *Rhododendron dauricum*; *mucronulatum*; *vaseyi*; *schlippenbachi*; *reticulatum*; *obtusum kaempferi*; *yedoensis poukhanensis*; *quinquefolium*; *nudiflorum*; *roseum*; *canadensis*; *japonicum*; *calendulaceum*; *molle*; *viscosum*; *arborescens*.

Jackson Dawson of the Arnold Arboretum gave Mr. Hatfield some small plants of *R. japonicum* which Mr. Hatfield crossed with *R. molle*. The resulting hybrids were the first authentic crosses between the Chinese and Japanese species and one of the dark orange colored clones was given the name "Miss Louisa Hunnewell" after one of the daughters of Walter Hunnewell (Sr.). The large flowers, fully two or more inches across, are produced in large rounded heads of a rich brilliant yellow color, with the slightest tinge of red, taken from the Japanese species. Its freedom of growth, profusion of bloom, size of flowers and cheerful brilliancy of color commend it in every way. It is one of several plants which originated in the Hunnewell Arboretum.

Another hybrid which Mr. Hatfield made was *R. canadensis* × *R. japonicum*. The Arnold Arboretum had a plant of this sent it by a Mr. Fraser from the Pacific Coast. The true identification of this plant was doubted and Mr. Hatfield was asked to make the cross again which he did, and the resulting seedling proved to be identical to Mr. Fraser's plant. In this particular instance several hundred plants were raised but only six had vitality enough to live and carry on. Incidentally, Mr. Hatfield attempted crossing a large number of azaleas. The progeny of several always turned out to be "mules"—seedlings seldom living more than two or three years. Also he tried *R. speciosum* crossed with *R. calendulaceum* and *R. japonicum*, but he never succeeded in getting more than two or three percent of these to make real plants.

(Note: For additional listing of tender species and varieties over the years as well as for list of rhododendrons growing in 1952, see main list, pages 78-81).

In 1928, T. D. Hatfield listed the hardy rhododendrons (as a result of their year's of growth in the Hunnewell Arboretum) as follows:

R. Album Elegans	Abraham Lincoln
Album Grandiflorum	Baroness Henry Schroeder
Alexander Dancer	Butlerianum

R. Boule de Neige
 Caractacus
 carolinianum
 " album
 catawbiense
 caucasicum album
 Charles Bagley
 Charles Dickens
 C. S. Sargent
 Delicatissimum
 E. S. Rand
 Everestianum
 fargesi
 F. L. Ames
 General Grant
 giganteum
 Gormer Waterer
 Henrietta Sargent
 H. W. Sargent
 James Mackintosh
 James Bateman
 Kettledrum
 Lady Clermont
 Lady Armstrong
 Lady Gray Egerton
 Lady Rolle
 Lady Hillingdon

Mme. Carvalho
 Marquis of Waterford
 maximum
 Minnie
 micranthum
 " longistylum
 minus
 Miss Caroline Hunnewell
 Mrs. C. S. Sargent
 Mrs. John Clutton
 Mrs. Milner
 Mrs. Charles Thorold
 Mrs. Simpson Mum
 Old Port
 praecox
 Princes Mary of Cambridge
 Princess Victoria
 Prometheus
 punctatum
 Ralph Sanders
 Scipio Sultana
 smirnowi ungeri
 sutchuenense
 The Bride
 venustum
 wellesleyanum
 wilsoni

The Pinetum

After he moved into the new house (1852) Mr. H. H. Hunnewell planted several kinds of evergreens about the grounds. Six *Abies nordmanniana* and six *Abies pinsapo* imported from Europe were planted in 1858. *Abies nobilis* and *A. cephalonica* received from Webber were planted in 1861. *Abies sibirica*; *Chamaecyparis lawsoniana*; *Picea abies compacta*; *Pinus excelsa*, *monticola* and *ponderosa* were all planted in 1862. So, there was a growing interest in evergreen trees which culminated in the following statement written by Mr. Hunnewell in his diary under the date of April 1867: "It will be my aim to plant in it (the Pinetum) every conifer, native and foreign, that will be found sufficiently hardy to thrive in our New England climate."

The actual work starting the Pinetum began in September 1866, when he noted in his diary on September 26, 1866, "Commenced improving piece of land, bought last year of Darling for a Pinetum." Since this time, plants have been continu-

ally planted, introduced from all parts of the northern hemispheres. Many were undoubtedly brought to America for the first time. After the establishment of the Arnold Arboretum in 1872, the Hunnewells were generous contributors to the various expeditions of E. H. Wilson and frequently they received small amounts of his original seed collections. These were immediately grown, and as a result, many of the trees in the Hunnewell Arboretum are among the tallest and oldest of their kinds in America today.

The story of this Pinetum is a lengthy one, and can not be told in a few printed pages, for the successes and failures were many. For instance, it took Mr. H. H. Hunnewell thirty years of experimenting with various clones of *Thuja plicata* from the Pacific Coast until he finally found a form that was hardy here in New England, a form which is widely grown here today. *Abies fraseri* was repeatedly tried, with little success, until a form was finally obtained from near the northernmost limits of its habitat in the South, and this did well. The white fir from California also was tried for many years, unsuccessfully, until a form was finally introduced from Colorado which has proved perfectly hardy over the years. This is now widely planted in the gardens of the northern United States.

Abies amabilis was still another western species tried for many a long year. In fact, plants were nearly fifty years old and only twelve feet tall before it was realized that *Abies homolepis*, growing close by for the same length of time and forty five feet tall, was a superior tree for this eastern area.

Many individual trees are still of great interest. There is an old white oak near the house which was the only tree on the pinetum grounds a hundred years ago and it is still in excellent condition—easily 60 feet high and with a spread of 80 feet. The old Norway spruce on the front lawn is undoubtedly one of the oldest in New England. It is so old that several young trees fifteen feet and more in height have sprouted from these layered branches which have rested on the ground for many years.

The century of careful experimentation with the growth and culture of these plants has resulted naturally in the production of many new ones. *Taxus media* and *Taxus media hatfieldi* are meritorious additions to the ornamental woody plants hardy in the northern United States and both are now widely grown. One interesting pine now nearly twenty feet tall is probably a cross between *Pinus strobus* and *P. parviflora*, and has caused considerable interest. These are only a few, others are recorded in the following list.

The hundreds of evergreen trees and shrubs growing in this arboretum are evidence enough of what has gone before. *Abies cilicica* one hundred feet high, the hardy strain of *Cedrus libani* nearly fifty years old and bearing large quantities of cones, dwarf forms of the Norway spruce nearly thirty feet in diameter and a *Taxus cuspidata densa* nearly thirty feet across—these are only a few of the splendid specimens as they are today.

The continual gleaming of information in the Hunnewell Arboretum during the

past century has not been publicized as well as it merits. Rather it has been undertaken in a quiet way, with information freely given when it was asked for, with visitors courteously admitted to the grounds at all times. The Hunnewells have been staunch supporters of the Massachusetts Horticultural Society and have been displaying plants in the various flower shows of the Society continually since 1856. The record of prizes won is long indeed. And so, although many a gardener fails to realize it, we have to thank the persistent efforts of three generations of Hunnewells for some of the plants we freely grow today and many of the practices we have freely adopted, all of which have resulted from their long and costly experiments in growing plants at Wellesley.

A Few of the Woody Plants Grown in the Hunnewell Arboretum 1852-1952

The dates given here are *approximate* only, being the dates on which the plants were first mentioned in the Hunnewell diaries or in the articles and records of Mr. Hatfield. Plants recorded as still present are not necessarily the original plants since these have died or been removed in many cases and others have been planted later. Mr. H. H. Hunnewell was introducing plants prior to 1852 and where these dates are known they are listed here. Frequently a plant was growing in the arboretum for many years before specific mention was made of it in the above records. This is not a complete list by any means, for hundreds of other plants including orchids, greenhouse plants and various kinds of fruits were grown. Nor is this a complete list of the plants now growing in this arboretum. It is merely a selected list, to show some of the interesting woody plants and especially some of those which may have been original or very early introductions.

O=Conifers and rhododendrons present in 1952.

‡=Plants that may have been introduced by the Hunnewell Arboretum, or in many cases, jointly introduced with the Arnold Arboretum (after 1872).

§=Plants originating in the Hunnewell Arboretum.

O <i>Abies alba</i> - 1847	‡O <i>Abies holophylla</i> - about 1905
‡ “ “ <i>columnaris</i> - 1868	‡O “ <i>homolepis</i> - about 1870
O “ <i>amabilis</i> - about 1862	‡O “ <i>koreana</i> - 1908
O “ <i>cephalonica</i> - 1860	O “ <i>lasiocarpa arizonica</i>
O “ <i>cilicica</i> - about 1870	‡ “ <i>mariesi</i> - 1879
‡O “ <i>concolor</i> - 1867 (hardy form)	O “ <i>nephrolepis</i>
O “ “ <i>violacea</i> - 1890	“ <i>nobilis</i> - 1867
‡ “ <i>fargesii</i> - about 1902	O “ <i>nordmanniana</i> - 1860
“ <i>faxoniana</i> - about 1902	O “ <i>recurvata</i>
O “ <i>fraseri</i> - 1867	O “ <i>sachalinensis nemorensis</i> -
‡ “ <i>grandis</i> - 1867	about 1914



PLATE XVI

Abies cilicica planted in 1870 and now the tallest tree in the Hunnewell Arboretum.

- O *Abies sibirica* - 1867
- O “ *veitchii* - about 1880
- O *Acer henryi* - before 1902
- Aurucaria imbricata* - 1867
- Berberis buxifolia* - 1847
- O *Buxus sempervirens* - 1847
- O *Cedrus libani* - 1847
- Cephalotaxus fortunei* - 1867
- Chamaecyparis lawsoniana* - 1867
- O “ *obtusa* - 1880
- O “ “ *lycopodioides*
1892
- O *Chamaecyparis obtusa nana* - 1892
- O “ *pisifera* - 1880
- “ “ *ericoides* -
1867
- O *Chamaecyparis pisifera filifera* - by
1892
- O *Chamaecyparis pisifera* “*filifera*
aurea” - by 1892
- O *Chamaecyparis pisifera plumosa*
- O “ “ *leptoclada* -
by 1892
- O *Chamaecyparis pisifera squarosa* -
about 1880
- O *Chamaecyparis pisifera* “*squarosa*
nana”
- O *Chamaecyparis thyoides*
- Cryptomeria japonica* - 1867
- O “ “ *lobbi*
- Cunninghamia lanceolata* - 1867
- Cytisus multiflorus* - 1847
- O *Fagus sylvatica* - 1847
- O “ “ *pendula*
- O “ “ *purpurea* - 1847
- O *Ginkgo biloba* - about 1855
- O *Juniperus chinensis* - 1867
- O “ “ *japonica*
- O “ “ *pfitzeriana*
- O “ *rigida*
- “ *communis suecica* - 1867
- O “ *formosana*
- Juniperus oblonga pendula* - 1867
- “ *sabina* - 1867
- “ “ *tamariscifolia* 1867
- ‡O “ *scopulorum* - 1890
- O “ *squamata* - 1867
- O “ “ *meyeri*
- “ *thurifera* - 1867
- O “ *virginiana glauca*
- ‡O *Larix eurolepis* - 1907
- ‡ “ *leptolepis* - probably 1861
- O *Libocedrus decurrens*
- Ligustrum japonicum* - 1847
- “ *lucidum* - 1847
- O *Metasequoia glyptostroboides*
- O *Picea abies* - 1852
- ‡ “ “ *clanbrasiliana* - 1867
- ‡ “ “ *compacta*
- ‡ “ “ *elegans*
- ‡O “ “ *gregoriana*
- ‡ “ “ *pygmaea*
- ‡ “ “ *pumila*
- ‡ “ “ *pyramidalis*
- O “ “ *septentrionalis*
- ‡O “ *asperata* - 1910
- ‡O “ “ *notabilis* - 1909
- ‡O “ “ *ponderosa* - 1910
- O “ *aurantiaca* - 1910
- O “ *bicolor* - 1870
- O “ *brachytyla*
- O “ *breweriana*
- O “ *engelmanni* - 1890
- O “ *glauca* - about 1854
- O “ “ *albertiana*
- O “ “ *conica*
- ‡O “ *glehni* - 1892
- O “ *jezoensis* - 1890
- “ “ *honodensis* - about
1890
- O “ *koyamai* - 1919
- O “ *likiangensis balfouriana*
- O “ *mariana doumeti* - 1900
- “ *maximowiczii* - about 1895

- ‡O *Picea montigena* - 1908
 O “ *obovata*
 O “ *omorika* - 1890
 O “ *orientalis* - 1867
 O “ *polita* - 1880
 ‡O “ *pungens* - 1862
 O “ “ *compacta* - before
 1900
 §O “ *pungens hunnewelliana* - before
 1923
 ‡O “ *purpurea* - 1910
 O “ *retroflexa*
 O “ *rubra*
 O “ *wilsoni*
 O *Pinus armandi* - by 1905
 “ *banksiana* - about 1860
 O “ *bungeana* - 1902
 O “ *cembra* - 1867
 O “ *cembroides edulis*
 O “ *densiflora* - about 1872
 O “ *echinata* - by 1905
 O “ *flexilis* - by 1902
 O “ *koraiensis* - about 1870
 “ *griffithi* - 1867
 “ *lambertiana* - 1867
 O “ *monticola* - 1867
 O “ *mugho mughus*
 O “ “ *rostrata*
 O “ *nigra austriaca* - 1867
 “ *nepalensis* - by 1905
 O “ *parviflora* - by 1905
 O “ *peuce* - 1894
 O “ *ponderosa* - 1867
 O “ *resinosa*
 O “ *sibirica*
 “ *strobis nana* - by 1900
 O “ *sylvestris*
 O “ *tabulaeformis*
 O “ *thunbergi*
Populus tacamahaca - 1847
Prunus lusitanica - 1847
 O *Pseudolarix amabilis* - 1867
 O *Pseudotsuga taxifolia* - 1847
Pyracantha - 1847
 O *Quercus robur* - 1847
Rhododendron
 O *catawbiense* - hardy 1890
 O “ *album* - hardy 1905
 O *carolinianum*
gandavense hybrids - 1877
 O *maximum*
 O *minus*
 O *obtusum amoenum* - 1871
 O *smirnowi*
 O *sutchuenense*
 O *wellesyanum* - before 1905
Rhododendrons and Azaleas
 (Many of these varieties were undoubtedly first introductions, but because accurate data is lacking, it is impossible to list the introductions here.)
 O *Abraham Lincoln* - 1928
Adrian Lothiar - 1889
 O *Album Elegans* - hardy 1905
 O “ *Grandiflorum* - 1895
 O “ *Nova*
Alexander Adie - 1889
 O *Alexander Dancer* - hardy 1905
 O *America*
 O *Amphion*
 §O *Apple Blossom*
Arthur Helps - 1889
 O *Atrosanguineum*
Auguste Van Geert - tender 1905
Aurora - 1889
Bacchus - hardy 1890
Bacon Dyke - 1889
Baroness Lionel Rothschild - 1889
Baroness Schroeder - 1890
 O *Beethoven*
Blanche Superba - tender 1905
Blue Bell - 1894
 O *Boule de Neige* - 1928

- Brighton - 1889
 Brittonia - tender 1928
 Brookline Seedling - 1905
 O Butlerianum - before 1928
 Bylsianum - 1889
 O Candidissimum
 Captain Webb - 1889
 O Caractacus - 1890
 §O Caroline H. Blake
 O Charles Bagley - hardy 1889
 Charles Napier - hardy 1889
 O Charles Dickens - hardy 1890
 Charlie Waterer - tender 1905
 Chelsoni - 1889
 Chevalier Felix de Sauvage - 1889
 Christiana - 1895
 Claude - hardy 1890
 Claude Pardoloton
 Coerulescens - hardy 1905
 Concessum - 1890
 Cottage Maid
 O Countess of Athlone
 Countess of Clancarty - 1890
 Countess of Morello - tender 1905
 Countess of Normanton - 1893
 Countess of Pourtalis - 1889
 Crown Prince - tender 1905
 Cruentum - 1889
 O C. S. Sargent - 1890
 O Cunningham's White
 Cynthia - 1893
 O Delscatissimum - 1890
 O Doncastum
 O Dorothy
 O Dr. H. C. Dresselhuys
 O Dr. V. H. Rutgers
 Duchess of Bedford - 1890
 Duchess of Connaught - 1889
 Duchess of Edinburgh - 1889
 Duchess of Sutherland - 1889
 Duke of Teck - 1895
 Earl of Haddington - 1889
 Eclipse - tender 1905
 O Edward S. Rand - hardy 1890
 O Everestianum - hardy 1905
 Exquisite - 1889
 Fastuosum - 1894
 O F. D. Godman - 1889
 O F. L. Ames - 1895
 Francis Dickson - 1889
 Frederick Waterer - 1889
 O General Grant - 1928
 George Hardy - 1889
 George Paul - 1893
 O Glennyanum
 Gloriosum - hardy 1905
 O Gorner Waterer - 1889
 Grace Darling - 1890
 Grand Arab - 1889
 Guacino - 1889
 Guido - 1889
 Hamlet - 1895
 O Hannibal
 Hector - 1889
 Helen Schiffner - 1905
 Helen Waterer - 1889
 O Henrietta Sargent - 1905
 Henry Bohn - 1889
 §O H. H. Hunnewell - 1889
 O H. W. Sargent - hardy 1890
 Isaac Davies - hardy 1890
 Isabel Mores - 1889
 Isago - 1892
 O Ignatius Sargent
 James Bateman - hardy 1890
 James Macintosh - hardy 1889
 James Mason - 1890
 James Nasmyth - hardy 1890
 §O Jane Peele
 Jean Byles - 1889
 §O Jean Ellis
 §O Jill Saunders
 J. Marshall Brooks - hardy 1889
 O Johann Strauss

- John Henry Agnew - 1894
 John Kelb - 1889
 John Spencer - 1890
 O John Walter - 1893
 John Waterer - 1889
 O Kate Waterer - 1889
 O Kettledrum - hardy 1890
 Kewense - tender 1928
 King of the Purples - hardy 1905
 Lady Annette de Trafford - 1889
 O Lady Armstrong - 1890
 Lady Dorothy Neville - tender
 1905
 Lady Frances Crossley - hardy
 1905
 O Lady Clermont - Hardy 1889
 O Lady Gray Edgerton - hardy
 1889
 O Lady Hillington - 1901
 Lady Lopez - 1889
 Lady Olive Guinness - tender
 1905
 O Lady Rolle - 1895
 Lady Tankerville - 1889
 Lord Eversley - 1889
 Lord John Russell - 1889
 Lord Palmerston - 1889
 O Lord Roberts
 Lord Sefton - 1905
 Lord Selborne - 1889
 §O Louisa Hunnewell - before 1915
 O Luciferum
 Lucidum - tender 1905
 Maculatum superbum - hardy
 1890
 O Mme. Carvalho - 1889
 O Mme. Masson
 Mme. Jean Penn - 1889
 Mme. Piccoline - 1889
 Mme. Wagner - tender 1905
 Mlle. Marie Closson - 1890
 Maggie Heywood - 1893
 Marchioness of Lansdowne - 1889
 Marie Stuart - tender 1905
 O Marquis of Waterford - 1928
 Martin Hope Sutton - 1889
 Maxwell T. Masters - hardy 1905
 Melton - 1905
 Meridan - 1889
 Meteor - hardy 1890
 Michael Waterer - 1889 - tender
 O Minnie - hardy 1889
 Miss Buller - 1889
 §O Miss Caroline Hunnewell - 1928
 Miss Jekyll - tender 1905
 Miss Mary Ames - hardy 1905
 Micrandum - hardy 1905
 O Mozart
 Mrs. Arthur Hunnewell - 1889
 tender
 O Mrs. Charles Thorold
 O Mrs. C. S. Sargent
 Mrs. Frederick - 1928
 Mrs. Frederick Hankey - 1889
 half hardy
 Mrs. Heywood - 1889 - tender
 Mrs. Harry Ingersoll - 1893
 Mrs. H. S. Hunnewell - 1895
 O Mrs. John Clutton - 1889
 Mrs. John Kelk - hardy 1905
 Mrs. Penn - 1892
 Mrs. J. P. Lade - 1895
 O Mrs. Milner - 1890
 O Mrs. P. den Ouden
 Mrs. R. G. Shaw - 1898
 Mrs. R. S. Holford - 1889
 Mrs. Russell Sturgess - 1889
 tender
 Mrs. S. Simpson - hardy 1905
 Mrs. Shuttleworth - 1890
 Mrs. Thomas Wain - hardy 1889
 Mrs. Wendell - 1890
 Mrs. Millbank - 1928
 Neilsoni - 1889

- Ne Plus Ultra - 1890
 Neige et Cerise - 1889
 Ochroleucum - 1889
 O Old Port - hardy 1889
 Olmsted, F. L. - 1895
 Papilionaceum - tender 1905
 O Parson's Gloriosum
 O Parson's Grandiflorum
 Pelopidas - 1895
 Penjerrick - tender 1928
 Picturastum - 1890
 Prince of Wales - 1889
 Princess Christian - 1889
 Princess Louise - 1889
 O Princess Mary of Cambridge
 1893 - tender
 O Princess Victoria - 1889
 O Prof. F. Bettex
 P. Simon - 1895
 Purity - 1893
 O Purpureum Elegans - hardy 1905
 Purpureum Grandiflorum - hardy
 1905
 O Purpureum splendens
 Queen - 1889 - tender
 Ralph Saunders - 1889
 Richard Wallace - 1889
 Robert Marnock - 1889
 Rosabel - 1889
 O Roseum Elegans - hardy 1905
 Roseum Grandiflorum - 1905
 Saint Simon - 1889
 Samuel Morley - 1889
 Sappho - 1895 - tender
 Scarlet Prince - tender 1928
 Scipio - 1889 - tender
 Sefton - 1895
 Sherwoodianum - 1889
 Shilsoni - tender 1928
 O Sibelius
 Sigismund Rucker - hardy 1889
 Silvio - hardy 1890
 Sir Arthur Guinness - hardy 1890
 Sir Joseph Whitworth - 1890
 Sir Robert Peel - 1889
 Sir Thomas Ackland - 1889
 Sir Thomas Seabright - 1889
 hardy
 Snowflake - 1889
 Souvenir 1889
 Stella - 1889 - tender
 O Sultana
 Sunshine - 1889
 Tippto Sahib - 1889
 Triomphe d'Angers - tender 1905
 O Van der Broecke
 O Van Weerden Porlman
 Varium - 1889
 Vauban - 1895
 Village Maid - 1892
 Warrior - hardy 1889
 O Waterer Gloriosum
 W. E. Gladstone - 1889
 O Wilhelmina
 William Austin - 1889
 William Cowper - hardy 1890
 William J. Penn - 1890
 William Minton - 1889
 †O Sciadopitys verticillata - 1867
 †O Spiraea henryi - since 1905
 O " miyabei - since 1905
 †O " trichocarpa - 1920
 †O " veitchi - 1907
 O Taxodium distichum - by 1880
 Taxus baccata - by 1905
 " " adpressa - 1905
 O " " aurea - by 1905
 " " fastigiata - 1847
 O " " repandens
 O " chinensis
 O " cuspidata - 1866
 " " densa - about
 1900
 §O Taxus media - about 1900



PLATE XVII

Taxus media hatfieldi originated in the Hunnewell Arboretum. This picture was taken by E. H. Wilson in 1929.

- §0 *Taxus media hatfieldi* - about 1900
 O *Thuja occidentalis* - 1870 ?
 " " *hoveyi* - 1867
 " " *meldensis* 1867
 Thuja occidentalis robusta - 1867
 O *Thuja orientalis*
 O " *plicata* - 1867
 O " *standishi* - about 1874
 O *Thujopsis dolobrata* - 1867
 O *Torreya mucifera* - by 1905
 O *Torreya taxifolia*
 O *Tsuga canadensis macrophylla*
 O " " *pyramidalis* 1902
 O *Tsuga caroliniana* - about 1895
 O " *chinensis*
 O " *diversifolia* - about 1900
 O " *heterophylla*
 " *mertensiana* - by 1905
 O " *sieboldi* - 1892
Ulex europaea plena - 1847
Ulmus campestris - 1847

Tree Measurements in feet, 1892-1949

(These are only a few of many recorded)

	<i>First Planted</i>	<i>1892 Ht.</i>	<i>1905 Ht.</i>	<i>1929 Ht.</i>	<i>1949 Ht.</i>	<i>Spread</i>
<i>Abies amabilis</i>	1882		5		25	20
" <i>brachyphylla</i>	1870	22	35			
" <i>cephalonica</i>	1860	42	51			
" <i>cilicica</i>	1870		49	59	82	30
" <i>concolor</i> (Colo. form)	1867	28	35	59		
" <i>holophylla</i>	1909			24	47	35
" <i>homolepis</i>	1880			54	69	
" <i>koreana</i>	1909				19	
" <i>lasiocarpa arizonica</i> After	1902				37	19
" <i>mariesi</i>	1880		9	20		
" <i>nephrolepis</i>	1914				35	
" <i>nordmanniana</i>	1860	42	59			
" <i>sachalinensis nemorensis</i>	1914				35	6
" <i>veitchi</i>	1880	15	32		52	
<i>Chamaecyparis lawsoniana</i>	1867		12			
" <i>obtusa</i>	1880	22	31		47	40
" <i>pisifera</i>	1880		32		56	40
" " <i>aurea</i>	1867	19	25			
" " <i>filifera</i>	1892		15'6"		45	50
" " <i>squarosa</i>	1880	20	29		50	45
<i>Ginkgo biloba</i>	1855		50		52	
<i>Larix eurolepis</i>	1913			30	60	
" <i>leptolepis</i>	1861	54				
<i>Picea abies</i>	1852	78	87		70	90
" <i>asperata notabilis</i>	1919				25	
" <i>bicolor</i>	1870	21	30		65	58
" <i>engelmanni</i>	1890		26		36	18
" <i>glauca</i>	1854		86		52	
" " <i>conica</i>	1909			5	12	

	<i>First Planted</i>	<i>1892 Ht.</i>	<i>1905 Ht.</i>	<i>1929 Ht.</i>	<i>1949 Ht.</i>	<i>Spread</i>
<i>Picea glehni</i>	1892		5		49	19
“ <i>jezoensis</i>	1890		17			
“ “ <i>honodensis</i>	1890		17			
“ <i>maximowiczii</i>	1895		11			
“ <i>koyamai</i>	After 1902				45	30
“ <i>mariana doumettii</i>	1900			17		
“ <i>omorika</i>	1890		16		41	20
“ <i>orientalis</i>	1867	33	49		64	23
“ <i>parryana</i>	1862		32			
“ <i>polita</i>	1880	17	34		57	
“ <i>pungens</i>	1862	33	39		69	
<i>Pinus bungeana</i>	After 1902			10	20	
“ <i>densiflora umbraculifera</i>	1902			10		
“ <i>banksiana</i>	1860		45			
“ <i>echinata</i>	By 1905				45	
“ <i>flexilis</i>	After 1902			22	37	
“ <i>koraiensis</i>	1870	22	38		35	29
“ <i>lambertiana</i>	1867	18	27			
“ <i>nigra austriaca</i>	1867		37			
“ <i>parviflora</i>	By 1905			20		
“ <i>peuce</i>	1894				29	
“ <i>resinosa</i>	1873		43		64	33
“ <i>strobus</i>	1840	56	85	90	90	60
<i>Pseudolarix amabilis</i>	1867	21	35		54	50
<i>Pseudotsuga taxifolia</i>	1867	36	57			
<i>Sciadopitys verticillata</i>	?		14	21	31	
<i>Taxodium distichum</i>	By 1880		43	47	54	33
<i>Taxus media hatfieldi</i>	1914 ?				15	
<i>Thuja standishi</i>	1874	15	28	36	45	41
<i>Torreya nucifera</i>	By 1885			25	26	
<i>Tsuga canadensis</i>	1860		57	72	86	
“ <i>caroliniana</i>	1895			30		
“ <i>diversifolia</i>	About 1900				37	
“ <i>sieboldi</i>	1892		15		31	

DONALD WYMAN

This information has been obtained from the published and unpublished diaries of H. H. Hunnewell, Walter Hunnewell, Sr., Walter Hunnewell, Jr., from many published articles and unpublished notes of T. D. Hatfield, and from first hand information given by Mr. Walter Hunnewell, Jr., and his present superintendent, Mr. John Ellis.