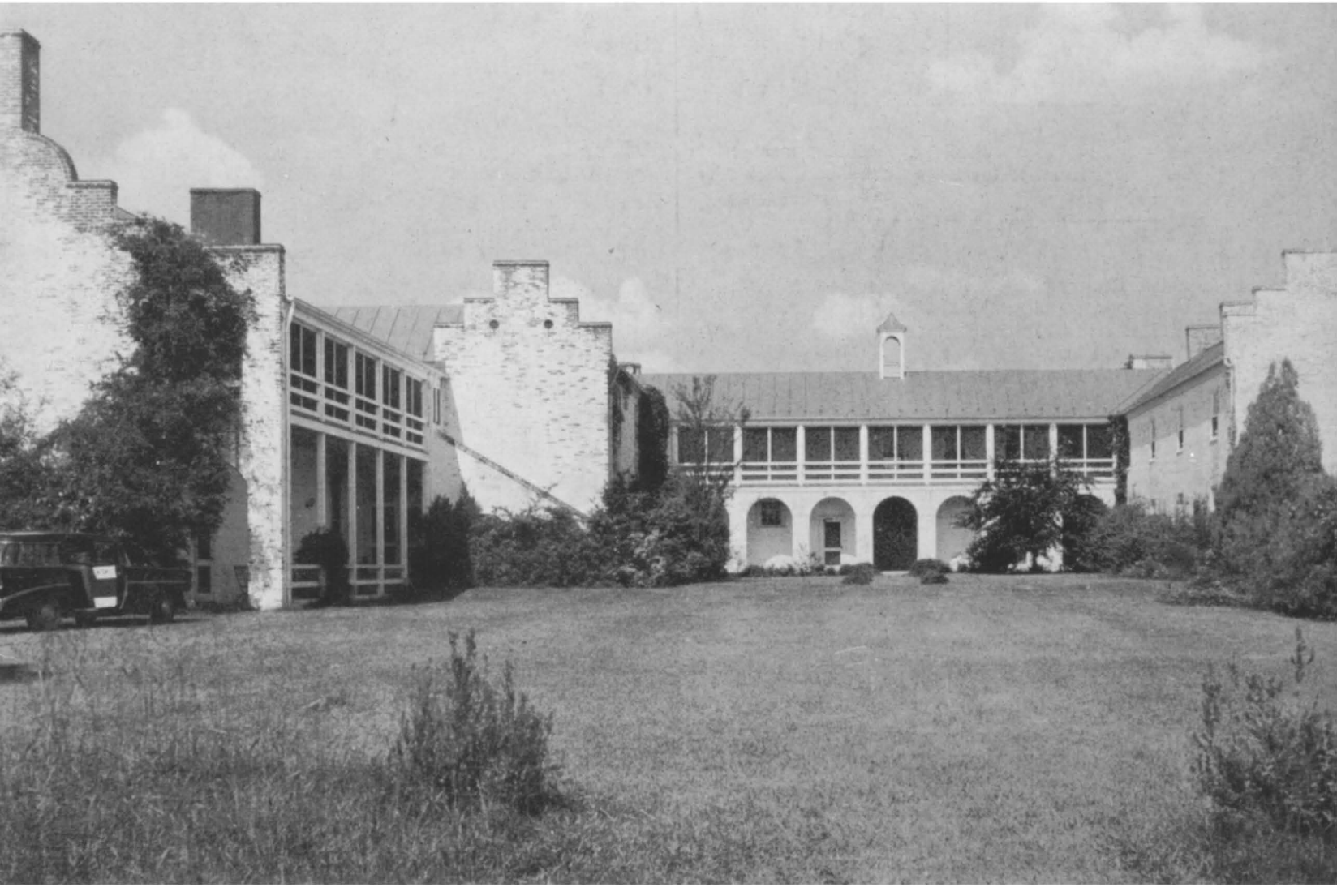
April 1963

The Boxwood Bulletin

A QUARTERLY DEVOTED TO MAN'S OLDEST GARDEN ORNAMENTAL



Site of the Annual Meeting of The American Boxwood Society, May 15, 1963

Boyce, Va.

Vol. 2, No. 4

Please address all communications, including manuscripts and change of address to the Boxwood Bulletin, Boyce, Va.

The Editors solicit and will welcome contributions of articles, news notes, photographs suitable for reproduction, of boxwood specimens, gardens, and plantings, and other items of probable interest to readers. It is requested that every item of such material carry the name and return address of the sender and be accompanied by an addressed envelope carrying the proper postage for return. While every effort always will be made for the protection of all material submitted for publication, the Editors cannot assume responsibility for loss or injury.

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The Boxwood Bulletin

April 1963 Vol. 2, No. 4

Walter S. Flory, Editor
Mrs. E. M. Whiting, Assistant Editor

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FRONT COVER

This is a picture of The Quarters and of The Quarters Court Yard at The Blandy Experimental Farm of the University of Virginia. Weather permitting, the May 15th Annual Meeting will be held on the Court Yard lawn. In case of unfavorable weather the formal meeting will be held in the Blandy Library (left wing), and the informal parts of the meeting will take place in the laboratory rooms.

The 10-room right-hand wing was built in 1825 as a quarters for slaves. The center and left wings were constructed in 1941.

Boxwood Gardens

Old and New

Our January Bulletin carried, in republished form, some material from Mr. Lewis' book which bears the above title. The current issue presents additional accounts from "Boxwood Gardens" and it is planned to present descriptions of still other gardens in later numbers of The Bulletin.

"Boxwood Gardens" was first published by the William Byrd Press, Inc., of Richmond, in 1924. No copies appear to be available for purchase at this time. The book carries descriptions of many of the Boxwood gardens that enthusiasts of this plant are much interested in.

We are grateful to the several persons who have so kindly aided us in our quest to secure permission for republishing these valuable and graphic descriptions. We have been aided, or advised, or referred to others by Mrs. Frances B. Valentine of the James River Garden Club; by Mr. Richmond Maury, President of the William Byrd Press; by Mrs. James Bland Martin, President, The Garden Club of Virginia — and by others. Mr. Hewlett W. Lewis, of Lewis and Valentine Nurseries, Inc., Greenvale, Long Island, New York, has advised us that Mr. Albert Lewis is no longer living, but "I believe he would have been glad for you to publish excerpts from his book." Mr. Lewis adds, "I feel that spreading information on plant material is very worthwhile."

In reproducing in these issues of The Boxwood Bulletin material — both textual and pictorial — from "Boxwood Gardens" we do so with the understanding that we have the implied permission of any who may be concerned. It has seemed impossible to find the person who has the authority to give us a definite "yes." We acknowledge complete indebtedness to the late Albert Addison Lewis for his beautifully worded accounts. We further give complete credit to the James River Garden Club for the photographs, sketches and plans which have been reproduced, and likewise give full credit to the Garden Club of Virginia for any of the pictorial material which they may now own. In addition credit is given to the William Byrd Press which published the original copies of this beautiful book.

It is felt that many members of The American Boxwood Society will find the accounts of these gardens — both old and new — of some interest and value.

Annual Meeting May 15th

The third Annual Meeting of the American Boxwood Society will be held at the Orland E. White Research Arboretum, of the Blandy Experimental Farm, near Boyce, Virginia, on Wednesday, May 15, 1963.

The back inside cover of this issue of The Bulletin lists details of the program for the annual meeting. As in previous years a number of plant experts — authorities on certain phases of Boxwood culture, or growth, or use, etc., will be present to discuss various points having to do with Boxwood growth and use.

As the program indicates, there will be ample time to inspect Boxwood types, to look over Boxwood literature in the Blandy library, to study dried pressed Boxwood specimens, and to discuss your favorite Boxwood problems with other members.

At noon there will be a Kentucky fried chicken box waiting for you if you send in a card reserving this.

Mid-May should be an ideal time, weather-wise, in Northern Virginia. Why not plan to attend the 1963 Annual Meeting?

Photographs Requested

If you have one or more good photographs of a Boxwood plant, of Boxwood plantings, of a Boxwood garden, or of a house or estate well landscaped with at least some Boxwood in evidence — won't you share these with your fellow members by loaning them for publication in The Bulletin. The item photographed was interesting to you, or you would not have taken the picture. An account of the interesting points of the picture will add to its value. All photographs submitted (to Box 85, Boyce, Virginia) will be returned on request, whether used or not. Good pictures add greatly to the interest and value of a publication. Your help is needed and requested.

IN MEMORIAM

Any organization such as ours is each year faced with the loss of valued members through death. Within recent weeks our Society has lost the three following charter members:

MRS. WILLIAM BELL WATKINS

MR. H. A. BARTHEL

MR. KARL F. FISCHER

Each of these persons has made their own important contribution to The American Boxwood Society. Each is greatly missed.

BOXWOOD

By J. T. Baldwin, Jr.
College of William and Mary

My remarks at the May 1962 meeting of the American Boxwood Society were based upon the account that follows. The essence of this account was published in the June 1962 number of *Gardeners Forum.*

Right off I should admit that I am a box enthusiast.

Recently I heard it claimed that green gardens are effective only for sophisticated gardeners. If the greenness be that of box, I do not agree with the claim. Box plants are grown on the estates of the rich and by the doorways of the poor. In both situations they are appreciated for their stately and dignified masses of green. An added attraction for those who have been privileged to grow up in the boxwood belt of the Eastern United States is the extremely delicate to foxy odor of the foliage. The fragrance is both sensuous and pervasive and always welcomed by those educated to it. Likewise, the spicy perfume of box flowers — especially of the flowers of some of the Asiatic boxes — is penetrating and delightful, yet few people seem to know it.

Buxus, the genus of boxwood, is often reported to consist of about thirty species in the mountains of Central and East Asia, of North Africa, and of Southern Europe and adjacent Asia and also in Madagascar, Tropical Africa, South Africa, the West Indies, and Central America. Just a cursory examination of herbarium specimens reveals that widely different plants have been placed in this genus. In this complex of plants generic lines are not sharply delimited, and botanists do not agree as to where the lines properly are. Very probably the number of species in *Buxus* is considerably less than thirty. At any rate, we here in Virginia are concerned with five species, or, for all practical purposes, with only three.

Boxwood was brought to Virginia by early settlers and ever since has been a prized horticultural subject in these parts. Williamsburg was founded in 1699; boxwood was most likely soon being grown in the new capital. We know that Colonel Custis as early as 1726 was importing box plants; that boxwood had been established at Westover between 1688 and 1735; that Tedington on the James had a magnificent terraced garden, though only a cemetery remains now to suggest what the place was like. The oldest date of death in that cemetery is 1727; the cemetery is surrounded with ancient plants of *Buxus sempervirens* var. *arborescens.* But priority for a definite record of introduction of box must go to Long Island; it is recorded that Nathaniel Sylvester came there in 1652, founded a manor, and soon thereafter "set plantations of box around it."

In recent years, hollies have been more and more used for plantings traditionally reserved for boxwoods. Hollies perhaps have a wider range of tolerance for soils and climate than do boxwoods, are less temperamental, and are more generally available in nurseries.

Until about a hundred years ago all the boxwoods grown in the United States were representatives of *Buxus sempervirens.* This species occurs across Southern Europe — back from the Mediterranean and across Western Asia to Iran and to some extent in North Africa. Wood of this plant has long been used for many purposes with the consequence that stands of box in many areas have been decimated. One of the large-scale uses was for shuttles for power looms. The wood became so expensive that substitutes were sought. Interestingly enough the woods of our flowering dogwood and of our persimmon replaced boxwood in the shuttle trade. Records show that the first shipment of these substitute woods went from the James River basin by way of Boston to Liverpool in 1865.

Introduction of *Buxus sempervirens* to the British Isles antedates recorded history. Because the plant was evergreen and long-lived and easily propagated by cuttings, people on the continent and in Britain built up connotations of immortality with box and developed religious associations with it. The plant came to be used for hedges and edgings and as specimen plants. And box was often a favorite with the topiarist. Boxwoods were often grown as dooryard plants on which linens were spread to dry and as screens around garden-houses to afford privacy and perhaps to conceal unpleasant odors with the pungent smell of box.

So boxwood was a part of the cultural heritage of many of the European immigrants to Colonial America. For sentimental, religious, and utilitarian reasons many individuals doubtless brought boxwood with them. They introduced clones from the continent as well as from the British Isles. In later years nurseries regularly imported box, especially from Holland, until quarantine regulations made it difficult shortly before World War I to bring in shipments. There are today in cultivation in the United States hundreds of clones of *Buxus sempervirens.* The fast-growing kinds became known as 'American Box'; slow-growing var. *suffruticosa* as 'English Box'; and var. *arborescens* as 'Tree Box'.

The species is extremely variable. The habit may be fastigiate, prostrate, weeping, shrubby, or arboreal. The leaves may be narrow to broad and rounded, notched, or apiculate. They may be flat, bullate, or twisted. They might remain dark green when exposed to the winter sun or become reddish or brownish when the chlorophylls are broken down and the carotenoid pigments allowed to show up. They may be variegated with flecks of white or yellow or have patterns of white or silver or gold against green.

Probably the most significant addition in recent years to the germplasm of *Buxus sempervirens* in the United States are the seedlings of Balkans origin grown by Edgar Anderson in the 1930's at Gray Summit, Missouri. Some clones from those seedlings are in the trade; notable among them is 'Vardar Valley', a handsome, low-growing plant with bluish

foliage. Several years ago I got a generous lot of seed from a boxwood plantation at Kakhetia in Russia, but failed to germinate any of them: I shall try again.

It is urged that more people grow box from seed. Plants in a single lot often vary greatly. Seedlings make excellent standard plants and develop efficient root systems. A. G. Smith, Jr., grew more than 5,000 seedlings at Blacksburg, Virginia, and certain outstanding ones have been selected for propagation. A half century ago Mr. Sam Appleby grew seedlings near Baltimore, Maryland. One of the most interesting of all boxes appeared among them: *Buxus microphylla* var. *compacta*. It originated in 1912. Upon Mr. Appleby's death, this and others of the seedlings were purchased by H. J. Hohman who immediately started propagating it. Rehder described the plant in 1937: "very compact depressed-globose shrub broader than high, making a yearly growth of 3/8" to 3/4"; the original plant reaching in 25 years the height of only 10 inches by 19 inches in width." At the suggestion of Doctor Wyman, Hohman named the plant var. *compacta* and called it 'The Kingsville Dwarf Boxwood.' Mr. Hohman recently wrote me that the plant is accepting Canadian winters and is also doing well in the deep South. A number of Maryland nurseries carry this variety. The gardener quickly recognizes this slow-growing dwarf to be a most valuable plant, but he comes to learn that it has three faults: it must be grown in the shade to be attractive; its stems are so brittle that a slight blow from a rake will break off a piece that has taken years to grow; and it continually throws sports that must be removed to preserve the compact nature of the plant and to prevent the sport from taking over altogether.

But these very sports are what makes *compacta* of such interest to the botanist. They are good evidence that the plant is a periclinal chimera — that its different layers of tissues differ genetically, perhaps even chromosomally. The sports differ greatly among themselves. They are a source of striking new clones. Mr. Hohman named one of the sports 'Curly Locks'; it is much admired by the landscaper. I have grown seedlings from 'Curly Locks', and among them are plants of great promise. I also have a sport *compacta* that may prove to be more horticulturally useful than the variety itself. Surely, the boxwood lover will want to grow representatives of this complex.

Mr. Hohman named another of Appleby's seedlings 'Green Pillow'. It too has a compact growth, has stiff branches, and is slow-growing; its foliage is much coarser than that of *compacta* and is greener. I have not seen this plant throw sports.

To emphasize further the desirability of growing boxwood from seed, I would cite some of my own marked variants. Among a lot of 1948 seedlings from open-pollinated *B. sempervirens pendula maculata* is a plant 17 inches high with a marked weeping habit and another 14 inches high with a very open habit, while sister plants are four to five feet tall. Among six ten-year-old seedlings from open pollinated *B. microphylla sinica* is a six-inch tall, prostrate plant with a good green color in winter. Among ten seedlings dating from 1952 and grown from open-pollinated *B. microphylla* are two plants with especially fine bluish foliage and one of them with very small leaves. All the seedlings designated are significant specimens and will in time supply clonal material.

Though most of our older plants at Williamsburg flower and set fruit freely, European *suffruticosa* and Asiatic *compacta* and 'Green Pillow' do not even flower. This is a basic problem to which attention should be given.

Let us mention briefly some of the boxwoods that are choice plants for our region.

First, representatives of *Buxus sempervirens*. Most of us, I suspect, would put var. *suffruticosa* close to the top of the list. Several other good clones are often confused with this plant. I also rate var. *myrtifolia* and var. *nana* (which I have from Kew) very high. And likewise var. *myrtifolia*, which is particularly handsome when the plant puts on flushes of new leaves; the new shoots have twisted, feathery, light-green leaves against the darker older foliage. The Kingsville strain of weeping (var. *pendula*) is magnificent; the best I have seen. I would praise equally highly the Kingsville var. *fastigiata;* I wonder sometimes how tall our specimens will grow. Our specimens of both these varieties are dark green throughout the winter and are vigorous growers. We have a second fastigiate clone that is also very good, and two or three seedlings with weeping habit that are promising. My favorite variegated box is var. *elegantissima*. Others like it too, for I have difficulty keeping a specimen on the grounds of William and Mary. Finally, I would list here 'Vardar Valley'. There are dozens of nameless clones in cultivation that are excellent.

Buxus microphylla, with an extensive range in China, Korea, Taiwan, and Japan, is just as variable as *Buxus sempervirens*. The plant that typifies the species botanically — because it was the first described and named — is native to Japan. It was introduced into the United States about 1860. It is one of the hardiest of the boxes. Plants of the clone usually grown become reddish in winter, though certain of my seedlings do not. As the name suggests, the leaves are small; they give the plant a clean-cut, neat appearance. The flowers are exceedingly fragrant. Seedlings of this phase of the species have a wide range of variability. Some of them have leaves smaller than the type, and the leaves might be lustrous green, green, or bluish green. My estimate is that we have only begun to discover the usefulness of this segment of *B. microphylla*.

Buxus microphylla var. *japonica* was introduced at about the same time as the type of the species. According to the literature, this variety has completely glabrous shoots. As I know it, this plant is not especially attractive, has yellow-green leaves, is not often grown, and is not generally useful. Again, if we follow the literature, it appears to me that the plants in our area usually designated var. *japonica* are properly referred to var. *sinica*, which has pubescent branches. The Chinese variety was brought to this country about the turn of the century. This plant is found in many parts of China and is a favorite in Chinese gardens. It would seem that this variety alone is just about as variable as *Buxus sempervirens*. It varies greatly in habit and foliage. Several clones are grown extensively in our region, and they are all satisfactory. They are vigorous growers and withstand a range of adverse conditions. They do well in full shade and in full sun, though often

those in the sun become discolored in winter. This variety during its sixty years in America has taken on a very important horticultural role, and my judgment is that increasing attention will be given to it. For example: this box might well be used as a screen to heights perhaps of twenty feet along streets and would serve at the same time as a buffer against street noises.

Korean box (*B. microphylla* var. *koreana*) was introduced in 1919. It grows to about twenty inches, has fine foliage, and is very hardy. It is an altogether attractive and useful plant. I know only two clones in the trade, though, unfortunately, plants more typical of the species are often offered under this varietal name. We should get more seed and more plants of this variety from Korea.

Buxus harlandii is a most effective plant with us. It has shining green leaves 1 3/4" by 3/8". I know two clones: one with a notched leaf; the other with rounded leaf (this plant came to me from Kew as *B. nepalense.*). And I have just recently obtained a small plant called 'Richard' with a deep, V-shaped notch in its leaf. Rehder and Wilson state: "This curious species is abundant in the gorges and ravines near Ichang (China) growing in rock-crevices and among stones in the bed and banks of streams where during summer floods it is submerged. It is found only at low altitudes where the winters are very mild and would not be hardy in northern temperate regions." I do not know what the range of hardiness of our clones is, but both of them do well in Williamsburg. They are the earliest box to put on new flushes of new growth in the spring, with the result that they are frost-pruned nearly every year. We have two plants that are about fifteen years old; in the spring of 1962 they were thirty inches tall, forty-inches broad, and flat-topped. They are very striking plants that excite the interest of those in search of new landscape materials. These two plants flowered and fruited for the first time in 1962. Incidentally, this species is even easier to propagate by cuttings than *B. sempervirens* or *microphylla.*

About ten years ago I got cuttings from Kew of *Buxus balearica* and of *B. wallichiana.* I was not successful in rooting the latter, and only one cutting of the former struck. The plant of *B. balearica* has proved to be hardy but is only inches tall. Strangely stubborn growth for a plant that might reach a height of sixty to seventy feet. We need to give further attention to these two species.

History of Buxus Sempervirens Inglis

By Elizabeth H. Inglis

Thirty years ago at the Second Annual Meeting of the Federated Garden Club of Michigan which was being held in Adrian, during the usual after lunch gardens tour — two beautiful boxwood were discovered adorning the grounds of the President. The climate of the lower part of our State with its long drawn out sudden changes of temperature in Winter and Spring is probably one of the reasons why the broad leaved evergreens cannot be dependably relied upon to furnish interest in our winter garden pictures, hence this beautiful pair of handsome thrifty boxwoods with no trace of winter damage was an exciting treat to behold!

Our gracious hostess when asked the explanation of this rarity in our climate explained that she was unable to account for its hardihood — that it had come in short sprigs to decorate a gift box of fruit from New York and her Mother, gifted with a green thumb, had slipped them and several of the twigs had thrived.

They had indeed! They were waist high and without sign of winter injury.

The pleasure of that first introduction was shortly to be greatly enhanced when the generous owner shared the clippings of a June pruning with an enthusiastic admirer who by the next Autumn had the pleasure of seeing about 50 young boxwood in little pots growing for their first winter in her greenhouse. In three more years they were planted out in the formal garden and there they are to this day.

Many attempts have been made to discover their ancestry. The late Professor Harley Bartlett, head of the Department of Botany at the University of Michigan, took specimens down to the United States Department of Agriculture at Beltsville, Maryland, but they could find nothing similar in their collection of boxwoods, and suggested that these might have grown and come from some region in the Baltic area, which could account for their hardihood.

During the 30 years it has been growing in the Lower Peninsula, specimens have been sent to the Arnold Arboretum — and two replies to inquiries to the Curator in office at that time revealed that they were hardy — and if I remember rightly that they were the best of a lot he was testing of some twenty or more clones — but that he was waiting for a winter of temperatures of below zero in order to make a judgement.

The correspondence pertaining to these plants are in the files of the University of Michigan, Department of Landscape Design — Professor Walter L. Chambers, chairman.

Specimens were also sent to Liberty Hyde Bailey at Cornell — unfortunately he was recuperating from an accident but his daughter Zoe replied that the plants were thriving in her father's collection and had come through several winters in the severe Cornell, New York, temperature. There were other horticultural stations contacted and the only failure was at the Morton Arboretum near Chicago — where from two different shipments the reports were negative.

The urge to have this useful winter-resisting plant known and more widely used in Michigan gardens became an ever increasing concern and many growers were contacted and the virtues of the plant explained to them. However so far as is known, only two owners of nurseries have taken advantage of the invitation to accept specimens. They are the Lott Nursery near Three Rivers, and the Cottage Gardens in Lansing. The latter is probably the largest wholesale grower of ornamental Evergreens in the State and after some eight or nine years of growing them the owner proclaims them "Honeys"!

The Sequoias
501 Portola Road
Portola Valley, California

Today's Challenge To Education

The Need for a National School of Horticulture

Throughout the horticultural community of America there has been steadily growing a rising tide of opinion that some delinquencies in our educational systems exist which are inimical to both its cultural and economic interests. Several factors point to this situation. There has, in many instances, been observed a wide spread practice of offering substandard and grossly misrepresented plant materials on the market by unscrupulous merchandisers. Complicating this condition and being of even far greater seriousness is the employment of an unskilled and irresponsible labor group as so called gardeners. This deplorable situation has resulted in depreciation of planted materials and landscape investment; declining public appreciation and interest, and a general lowering of the status of the professional gardener with resulting unfavorable wage standards. These pernicious conditions need correction before they pose an even more serious threat to American horticulture.

A cross sampling of opinion of responsible interests in the horticultural field have indicated a general consensus that a specially designed National School of Horticulture for the gardening professions is needed for the United States — a great centralized institution of eminence, distinction and authority which will have the facilities for producing graduates of academic standing and possessing an unusually wide and thorough practical experience. Through missionary activities it must also have the capability for public education both in the matter of horticultural appreciation and understanding, and to build a new image of the gardening professions which will more clearly mirror the area of knowledge and experience involved. This should reveal the importance they bear to the economy and culture of the humanitarian world we hope to preserve.

The National Association of Gardeners has instituted a survey with a view towards promoting a coordination of responsible horticultural interests in an organization and financing program for such a school project. The Association feels that an institution of this special design would have the influence necessary to create an improved horticultural and economic climate in which more young men would be attracted to the gardening professions and, also, which would propagate more attractive opportunities. Better standards of remuneration would then develop to justify their decisions to enter these professions. Obviously, a very dedicated type of orientation and administration would be of the highest consideration. To achieve its objectives the institution would depend largely upon the quality of its educational product and its impact upon public conception. The conversion of public attitude is all important. It could mean another milestone in horticultural progress.

Cecil F. Carter, *Chairman*
Education Committee
National Association of Gardeners

Boxwood At Mount Vernon

By J. T. Baldwin, Jr.

At the May 1962 meeting of the American Boxwood Society I casually remarked — to the consternation of some of the members — that the plantings of *Buxus sempervirens* var. *suffruticosa* at Mount Vernon might have been made after the death of George Washington.

I based my remarks on statements made by Paul Leland Haworth in his book, *George Washington* subtitled *Country Gentleman,* the Bobbs-Merrill Company, Indianapolis, 1925. He says, on pages 160-161: "One of the sights today at Mount Vernon is the formal garden, which all who have visited the place will remember. Strangely enough it seems impossible to discover exactly when this was laid out as it now stands. The guides follow tradition and tell visitors that Washington set out the box hedge, the principal feature, after his marriage, and that he told Martha that she should be mistress of this flower garden and he the master of the vegetable garden. It is barely possible that he did set out the hedges at that time, but, if so, it must have been in 1759, for no mention is made of it in the diary begun in 1760. In April, 1785, we find by his diary that he planted twelve cuttings of the 'tree box' and again in the spring of 1787 he planted in his shrubberies some holly trees, 'also . . . . . some of the slips of the tree box.' But of box hedges I can find no mention in any of the papers I have seen. One guess is about as good as another, and I am inclined to believe that if they were planted in his time, it was done during his presidency by one of his gardeners, perhaps Butler or the German, Ehler. They may have been set out long after his death. At all events the garden was modeled after the formal gardens of Europe and the idea was not original with him."

The Boxwood Bulletin for July 1962 reprinted an account of boxwood at Mount Vernon from the 1954 annual report of The Mount Vernon Ladies' Association.

I have just (January, 1963) read *The Journal of Latrobe* by Benjamin Henry Latrobe, Architect of the Capitol at Washington, D. Appleton and Company, New York, 1905. This remarkable man visited Washington at Mount Vernon in July, 1797 — Washington died in December, 1799 — and entered the following in his journal (pp. 51-52): "The ground on the west front of the house is laid out in a level lawn, bounded on each side with a wide but extremely formal serpentine walk shaded by weeping willows, a tree which in this country grows very well upon high, dry land. On one side of this lawn is a plain kitchen garden, on the other a neat flower garden laid out in squares, and boxed with great precision. Along the north wall of this garden is a plain greenhouse. The plants were arranged in front and contained nothing very rare, nor were they numerous. For the first time since I left Germany I saw here a *parterre* stripped and trimmed with infinite care into the form of a richly flourished *fleur-de-lis,* the expiring groan, I hope, of our grandfathers' pedantry."

Our guess now is that *suffruticosa* was planted at Mount Vernon during Washington's time.

Rooting Boxwood Cuttings Under Pliofilm

By W. S. Flory and C. C. Crabill

The Blandy Experimental Farm, University of Virginia

Boxwood his many desirable characteristics. The ease with which it may be vegetatively propagated is not the least of its advantages.

One simple and convenient method of rooting cuttings of many plants is described here. This method has often been used at the White Research Arboretum in rooting comparatively small numbers of Boxwood cuttings. It has also been successfully followed in the multiplication of many other species and varieties of plants, some of which are much more difficult of propagation than is Boxwood.

The method consists, in brief, of placing cuttings in a good rooting medium in a container of appropriate size, and then — following heavy watering — of tightly covering the cuttings with a moisture conserving Pliofilm bag which is only removed when moisture droplets are no longer apparent within it. By this time rooting of the cuttings may have occurred. If not, watering is repeated and the bag replaced. Time of year of making cuttings, the types of media used, and other environmental factors all necessarily play a part in subsequent results as eventually evidenced by the proportions of cuttings successfully rooted.

Description of the Method

A container is selected of suitable size for the number of cuttings being used. For small numbers of cuttings a No. 10 can (Fig. 1) is of convenient size and is readily obtained. This size container (approximately one gallon capacity) will readily take care of 20 to 25 Boxwood cuttings.

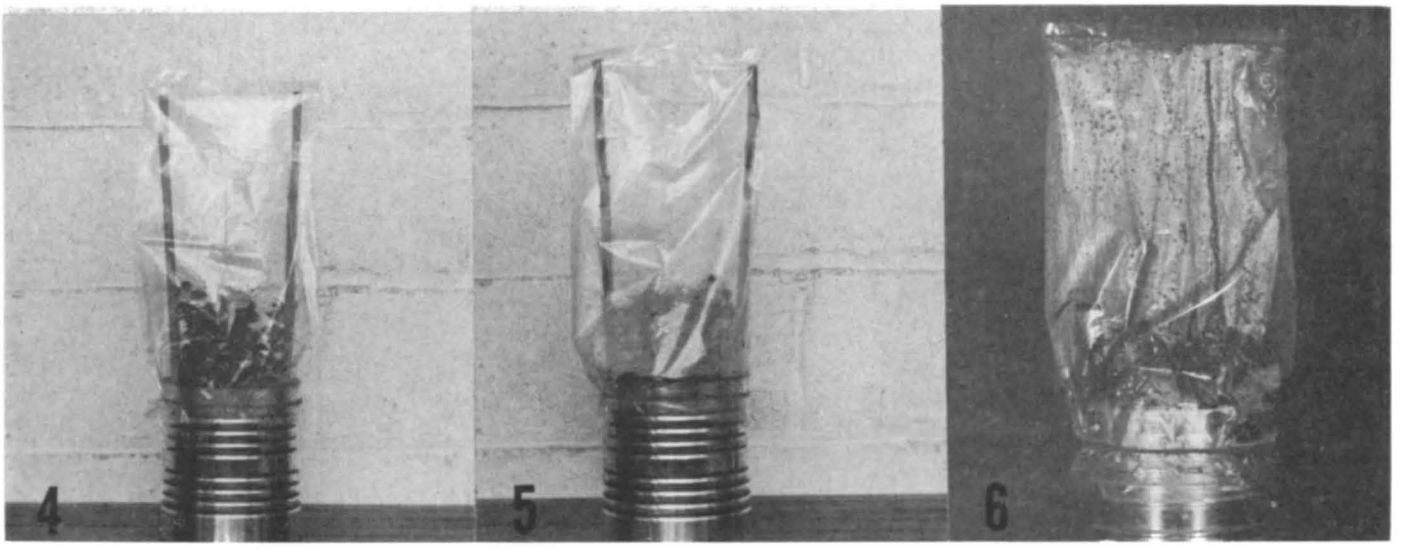
Several holes are punched in the bottom of the can to allow for drainage of excess water. These holes may be readily made with a beer can punch or by driving a large nail or spike. About an inch of fine gravel in the bottom of the can will further facilitate drainage. The containers may then be filled to within less than an inch of their tops with the desired rooting medium. There are several satisfactory rooting media. Perhaps those most commonly used are sharp sand, a mixture of sand and peat (about half and half, or varying as desired), or vermiculite.

Cuttings are most often made from terminal growth, and are usually about six inches in length (Fig. 2). These are inserted in the rooting medium to a depth of about one and one-half inches (Fig. 3). Before insertion the cuttings may be treated with one of the hormone powders, such as Hormodin or Rootone, if desired (Fig. 8). Leaves of many plants are known to provide a root promoting growth substance, and for this reason it is advisable to allow most of them to remain on the cuttings. In practice we usually remove leaves from one or two inches at the base in order to eliminate much of the debris of rotting leaves from the rooting medium.

After cuttings are placed in the container, the medium is thoroughly soaked with water. The cuttings are then promptly covered with an appropriate sized Pliofilm bag, which is held snugly to the container by a strong rubber band (Fig. 4). It is usually best to support the bag by two light sticks (Figs. 3-5). Small bamboo stakes make excellent supports if available.

As the evaporation from the medium and transpiration from the cuttings occurs, moisture condenses on the Pliofilm cover (Figs. 5 and 6). Soon an essentially water saturated atmosphere is present within the bag, and around the cuttings, reducing further evaporation and transpiration to a minimum. This saturated atmosphere is rather similar to that obtained from a constant mist spray, has the same resulting advantages so far as root initiation is concerned, and is more simply and economically obtained.

Figures 1-3. — Fig. 1. A No. 10 can ready for cuttings. Bottom drain holes, a basal inch of gravel, and the vermiculite which almost fills the can cannot be seen. Stakes to support a Pliofilm bag are already in place. — Fig. 2. Cuttings of *Buxus sempervirens* var. *maculata* prepared for insertion in the rooting medium. Leaves have been removed from the basal inch and a half of stem. — Fig. 3. Cuttings are in place, and the medium has been thoroughly soaked with water.



Figures 4-6. — Fig. 4. A Pliofilm bag placed over the cuttings and container shown in Fig. 3. This bag is held firmly to the container by a strong rubber band. — Fig. 5. A few hours after installation of the Pliofilm bag. Moisture has condensed on the inner surface of the bag and is starting to gather into small droplets. — Fig. 6. About a day later. The atmosphere within the bag is saturated; large drops of water are present on its inner surface with some of them running down the sides of the bag.

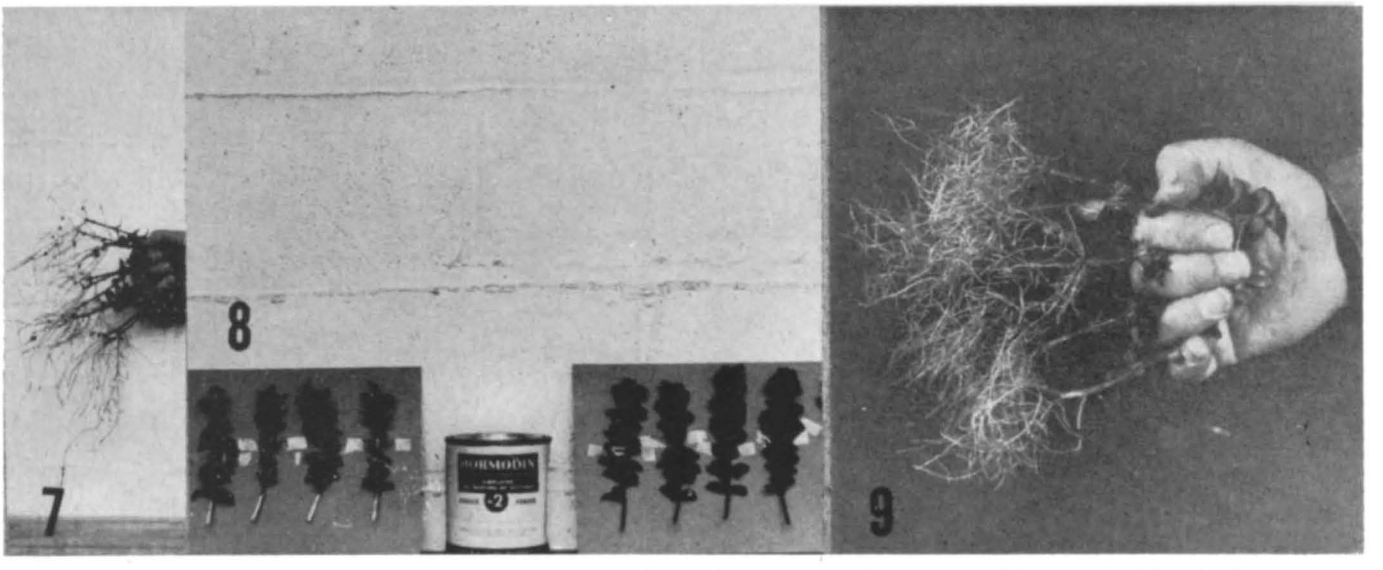
Because of the imperviousness of the Pliofilm, and its snug fit to the can, there is little water loss. Consequently many weeks pass before the medium dries and requires more water. Cuttings arranged in such a container, if placed in a light warm area which is shaded from intense sun, may be left for many weeks without further attention.

Hardwood cuttings of many Boxwood varieties will start to root within a month or so, by this method, and within a very few months will show long and well-developed roots (Figs. 7 and 9).

Results of Boxwood Propagation Experiments

For a number of months past we have kept records on each of the lots of Boxwood that it has become desirable to increase by means of root cuttings. A rather complete summary of this data is given in Table 1.

It will be noted (Table 1) that the data cover a total of 24 lots of cuttings, including those of (1) *Buxus Harlandii*, (2) two varieties or cultivars of *B. microphylla* and, (3) 11 varieties or cultivars of *B. sempervirens*. The records include the dates when the various cuttings were made, the types of rooting media used, the number of cuttings in each of the 24 lots, together with both the numbers and percentages of those which rooted successfully in each case.



Figures 7-9. — Figs. 7 and 9. Heavy root growth about 60 days following taking of the cuttings. These two pictures have been made with different backgrounds, and at different magnifications, in efforts to best depict the root growth. — Fig. 8. Boxwood cuttings are given some stimulus to earlier and heavier rooting by use of Hormodin No. 2. Cuttings on the right are untreated, like those in Fig. 2. Cuttings on the left have been dipped in the powder, the excess shaken off, and are ready for insertion in the rooting medium.

Table 1. Data on Boxwood cuttings of several species and varieties made at different times of year and rooted, under Pliofilm, in three different media.

Buxus taxa	Cuttings made	Media used	Number of cuttings made	Number of cuttings rooted	Per cent rooted
sempervirens vars:					
angustifolia	June 6	vermiculite	10	7	
	July 11	sand & peat	15	15	
	Aug. 7	vermiculite	10	10	
	(totals		35	32)	91.4
arborescens	Oct. 5	sand	50	35	70.0
decussata	Ang. 10	vermiculite	10	10	100.0
fastigiata	June 6	vermiculite	10	10	
	Oct. 27	vermiculite	25	23	
	Dec. 14	sand & peat	8	8	
	(totals		43	41)	95.3
glauca	Aug. 10	vermiculite	10	10	100.0
Handsworthii	June 6	vermiculite	10	8	80.0
latifolia nova	Aug. 10	sand & peat	10	8	80.0
maculata	June 6	vermiculite	10	10	
	July 11	vermiculite	100	92	
	Aug. 10	sand & peat	10	10	
	(totals		120	112)	93.3
marginata	July 29	sand	12	11	
	Nov. 1	vermiculite	20	20	
	(totals		32	31	96.9
pendula	May 4	vermiculite	20	18	90.9
undulifolia	Aug. 10	vermiculite	10	9	90.0
Harlandii	Aug. 15	sand & peat	20	20	100.0
microphylla vars:					
koreana	April 11	vermiculite	15	11	
	July 24	sand	200	197	
	Oct. 27	vermiculite	10	10	
	(totals		225	218)	96.9
japonica	June 6	vermiculite	10	10	
	Dec. 14	sand & peat	8	4	
	(totals		18	14)	77.8
	Grand totals		613	566	92.3

Of the total 613 cuttings considered, 566 — or 92.3% — rooted. Cuttings of the 14 species or varieties used all resulted in high proportions of rooted plants. These did vary from 70% to 100% with respect to successfully rooted cuttings. In general the differences are attributed, however, to such factors as those possibly due to variations in the time of year of taking cuttings; to the use in some cases of terminals that were too small, or otherwise not of optimum type, etc.

In none of the cases do records cover cuttings made in the months of January, February, March or September. Table 2 summarizes data, by months, on the number of cuttings made and rooted. The percentage of rooting varied from 73 to 100. Variations in the number of cuttings used tend to obscure any actual or statistical differences that may be due to time of taking cuttings, if such exist.

Differences due to the rooting media used are even less apparent. Of 262 cuttings in sand, 243 (92.7%) rooted. Of 71 cuttings in sand and peat, 65 (91.5%) rooted. Of 280 cuttings in vermiculite, 258 (92.1%) rooted. The differences in proportions of cuttings rooted are clearly below the level of statistical significance and indicate that the three media are equally satisfactory for purposes of rooting Boxwood under Pliofilm.

Table 2. A summary by months of the Boxwood cuttings made and rooted.

Month	Number of Cuttings		Per cent rooted
	Made	Rooted	
April	15	11	73
May	20	18	90
June	50	45	90
July	327	315	96
August	80	77	96
October	85	68	80
November	20	20	100
December	16	12	75

Discussion

In Boxwood there is some variability, from taxon to taxon, both in the percentage of cuttings rooting successfully, and in the length of time necessary to initiate rooting. *Buxus microphylla koreana,* for example, not only consistently gives high percentages of rooted cuttings, but these roots are initiated in a comparatively short time. Table 1 does not give information regarding length of time to initiate rooting. The three lots of Korean Boxwood considered in Table 1, however, rooted in 41, 28 and 17 days, after being taken in April, July and October, respectively. The arborescent types usually require a longer period to initiate roots on cuttings. Thus *Buxus sempervirens angustifolia* started roots on cuttings in 61, 99 and 73 days following insertion of lots taken in June, July and August, respectively. It usually requires a similar length of time to induce roots on *B. s. fastigiata.* Of the three lots of this recorded in Table 1, the cuttings taken in June and in October struck roots in 76 and 73 days respectively. Cuttings made from this same variety in October, however, began rooting in only 33 days.

Boxwood cuttings root readily, on the whole, regardless of when they are made. There are doubtless seasonal, as well as varietal variations that have effects on the rapidity and the success of rooting these cuttings, although there is still much to learn about such factors — and the relative importance of the different factors. An experiment in which a significant number of cuttings are taken at least once each month throughout the year, from at least two different Boxwood taxa (one that is comparatively easy, and the other comparatively difficult to root) properly planned and executed, should yield considerable additional information of value.

The method described here of rooting cuttings under Pliofilm can readily be adapted to propagating containers and benches of many different sizes, depending upon the number of propagations desired.

Summary

A method is described of rooting Boxwood cuttings under Pliofilm. This method has been found to be simple, cheap, clean and convenient, and is applicable to the vegetative propagation of many other woody plants. Its chief value lies in the moisture constancy achieved under Pliofilm which permits cuttings to be carried in excellent condition for many weeks, without the addition of water.

Philip Miller, F.R.S., on Buxus

(From Volume 1, Part 1, of The Gardener's and Botanist's Dictionary, published in London, 1807.)
(The derivation from the Greek, of *Buxus,* is given first.)

Engl. Box. Fr. Buis.
Lin. gen. n. 1053. Reich. 1148. Schreb. 1420.
Tornef. 345. Fuss. 388. Gaertn. t. 108.
Class. 21. 4. Monecia Tetrandria.
Nat. order of Tricoccae. — Euphorbiae Juss.

GENERIC CHARACTER.

Male flowers prominent from the buds of the plant.
Cal. *Perianth* three-leaved: *leaflets* roundish, obtuse, concave, spreading.
Cor. *Petals* two, roundish, concave, very like the calyx, but larger.
Stam. *Filaments* four, subulate, erect-expanding, rather larger than the calyx. *Anthers* erect, twin.
Pist. Rudiment of a germ without style or stigma. Females in the same bud with the males.
Cal. *Perianth* four-leaved: leaflets roundish, obtuse, concave, spreading.
Cor. *Petals* three, roundish, concave, very like the calyx, but larger.
Pist. *Germ* superior, roundish, obtusely three- cornered, ending in three, very short, permanent *styles. Stigmas* obtuse, hispid.
Per. *Capsule* coriaceous, roundish, three-beaked, three-celled, bursting elastically into three parts.
Seeds twin, oblong, rounded on one side, flat on the other.

ESSENTIAL CHARACTER.

Male. *Cal.* three-leaved. *Petals* two. The rudiment of a germ.
Fem. *Cal.* four-leaved. *Petals* three. *Styles* three. *Caps.* three-beaked, three-celled. *Seeds* two.

SPECIES.

1. Buxus sempervirens.
   Lin. Spec. 1394. *Reich.* 4. 128. *hort. cliff.* 441. *ups.* 283. *mat. med.* 200. *Gaertn. fruet.* 2. 125. *Huds. angl.* 417. *With.* 1068. *Hall. belv.* n. 1610. *Scop. carn. n.* 1173. *Allion. pedem. n.* 2097. *Du Roi barbecc.* 1. 118. *Duham, arb.* 1. 115. *t.* 46. *Pallas. ross.* 1. 17. *Villars dauph.* 2. 336. *Raii hist.* 1693. *Ger.* 1225. *emac.* 1410. *Park.* 1428. *f.* 1. 1429. *Camer. epit.* 601.
   a. B. arborescens. *Baub. pin.* 471. *Mill. dict. n.* 1. *Blackw. t.* 196. *Common Box-tree.*
   b. B. angustifolia. *Raii syn.* 445. *Huds.* B. *Mill. diet. n.* 2. *Narrow-leaved Box-tree.*
   c. B. suffruticosa. *Mill. diet. n.* 3. *Dwarf Box.* B. fol. rotundioribus. *Baub. pin.* 471. — humilis. *Dod. pempt.* 782.

DESCRIPTION, Etc.

(Box is well known in its dwarf state, and as a shrub about three feet in height; it becomes however, when left to itself, a tree, twelve or fifteen feet

high, with trunk equalling the human thigh in thickness, covered with a rugged, grayish bark, that of the branches yellowish. The wood is of a yellow colour, of an even close grain, very hard and ponderous. It is the only one of the European woods which will sink in water. Theophrastus ranks it with the Ebony; for closeness of grain. The leaves are ovate or oval in the common sort, hard, smooth, glossy, evergreen, very dark green above, pale green underneath, something resembling those of Myrtle, but blunt and commonly emarginate at the end, the edges are revolute, they are set on very short petioles, and on the twigs they come out regularly in pairs, so close as almost to conceal them. On these, from the axils of the leaves, come out the small herbaceous flowers, in round bunches; a female flower occupying the middle of the bunch, and being surrounded by several males. The female flower is succeeded by a capsule of a globular form, very smooth, shining, tricoccous, and before it opens having three beaks, then resembling a tripod: the rind is three-valved, and the valves are two-horned; the *cocculi* or grains are of the consistence of paper, two-valved, and opening with an elastic spring: receptacle central, three-sided, and short: in each cell is a pair of seeds, ovate, growing more slender upwards, triangular-compressed, obliquely truncate at the end, blackish brown or black, smooth.

Mr. Miller insists that the Common Box-tree, the narrow-leaved, and the Dwarf or Dutch Box) are three certainly distinct species. The two sorts of Box Tree have been frequently raised from seeds, and constantly produced plants of the same kind from those the seeds were taken from; and the Dwarf Box will never rise to any considerable height with any culture, nor have I ever seen this sort flower, where the plants have been encouraged to grow many years in the greatest luxuriancy. There are two or three varieties of the first, which are propagated in the gardens, one with yellow, and another with white striped leaves. The other has the tops of the leaves only marked with yellow, which is called Tipped Box.

(The Box-tree is a native of most parts of Europe from Britain southwards. I have seen whole mountains covered with it between Lyons and Geneva, in Savoy, Etc. but none of any size. It is also very common in many parts of Burgundy, Dauphine and Provence. It abounds in many countries of Asia, as about mount Caucasus, in Persia, China, Cochinchina, Etc. Also in America. In England it was formerly much more common than it is at present. Gerarde says, "it groweth upon sundry waste and barren hills in Englande:" and Parkinson, "that it is found with us in many woods and wood grounds; that it is also planted in divers orchards or house backsides, where it never groweth high, but serveth as a bush to dry linnen on, Etc." Many of these bushes however have grown up to trees of a reasonable size, about old mansions, and farm-houses, but are now for the most part destroyed.

"These trees rise naturally," says Evelyn, "in Kent, at Boxley, and in Surry, giving name to Box-hill. He that in winter should behold some of our highest hills in Surry clad with whole woods of them, for divers miles in circuit; as in those delicious groves of them belonging to the late Sir Adam Brown of Bechworth-castle, might easily fancy himself transported into some new or enchanted country."

The enchantment, alas! has been long broken.) Mr. Miller, in 1759, lamented, that the trees on Box-hill, had been pretty much destroyed; though many remained of a considerable bigness. (The destruction since that time has been much greater.

It has been conjectured that Box-hill was planted with these trees by the Earl of Arundel: but there is the most authentic proof that they were there before his time, and the ground on which they grow was not his property.

Not only this hill near Darking in Surry, and Boxley in Kent, but Boxwel in Coteswold, Glocestershire, was named from this tree.

Mr. Woodward remarks it as plentiful on the chalk hills near Dunstable. It is fond of open dry situations, and a calcareous soil. In temperate climates and seasons it flowers in February and March.

The wood of the Box-tree sells at a high price, by weight. Being very hard and smooth, and not apt to warp, it is well adapted to a variety of nicer works. "It is of special use," says Evelyn, "for the turner, engraver, carver, mathematical-instrument-maker, comb and pipe or flute-maker; the roots for the inlayer, and cabinet-maker. Of Box are made wheels and shivers, pins, pegs for musical instruments, nut-crackers, button-moulds, weaver's shuttles, hollar-sticks, bump-sticks, and dressers for the shoe-maker, rulers, rolling-pins, pestles, mall-balls, beetles, tops, tables, chess-men, screws, bobins for bone lace, spoons, knife-handles, nay the stoutest axle-trees, but especially combs:

"Non ultima belli
"Arma puellaris; lequeos haec nectit amantum,
"Et venatricis disponit retia formae.

The English wood is esteemed inferior to that which comes from the Levant; and the American Box is said to be preferable to ours.

The ancients made combs of Box, and musical instruments to be played upon by the mouth. The Romans likewise clipped it into form, for which nothing is more fit, says Pliny; *ut quae (arbor) ob dense subnascentes surculos & frondes, in animalium aliorumve effigies componi & detonderi prae alia quae-cunque apta est.* And Martial observes of the garden at Bassus's country-house:

" ---- ---- otiosis ordinata myrtetis,
'Viduaque Platano, *tonsilique buxeto.*"

It was second to the Yew with us in former times for the purpose of being clipped into the shape of animals, Etc.: But the Dwarf Box stood unrivalled "for bordering up a knot, and was esteemed a marvellous fine ornament to the flower-garden." The branches were in request among our ancestors for decking up houses; they are still seen among other evergreens in churches at Christmas, and in some countries they are borne by attendants at funerals.

In our plantations, the Box still keeps its place deservedly among ornamental evergreens. It will flourish under the deepest shade, and will thrive in any soil and exposure. Dr. Stokes affirms that it is fit to cut down in about thirty years.

Box has been much celebrated as a medicine in the veneral disease, colics, intermittent fevers, Etc. Haller says, *vix credo serio in usum recipi.* Our Gerarde observes, "that it is more fit for dagger-hafts than to make medicines; though foolish empiricks and women leaches do minister it against the apoplexy and such diseases." He adds, "that turners and cutlers call this wood dudgeon, because they make dudgeon-hafted daggers with it."

Parkinson, in his first work says, "it has no physical use among the most and best physicians, although some have reported it to stay fluxes, and to be as good as Guaiacum for the French disease." Yet in his second work he sets it down "as a medicine for the bite of a mad dog! as a cure for the bots in horses; and the leaves and saw-dust boiled in lye, to change the hair to an Aborne (Auburn) or Abraham colour."

According to Dr. Withering, "an empyreumatic oil, distilled from the shavings, is often used as a topical application for the piles, and seldom fails to procure ease; it will frequently relieve the toothach, and has been given internally in epilepsies; the leaves powdered destroy worms." Decoctions of the wood and bark are wholly disused, on account of their being very nauseous and disagreeable to the stomach.

Pliny affirms that no animal will touch the seed of Box. Gmelin relates that the branches are fatal to the camels that eat them. None of our animals seem to touch this tree. Corsican honey was supposed by the ancients to owe its infamy to the bees feeding on the Box.

The name varies very little from the Greek and Latin in the European languages; being *Bucks* or *Bucksbaum* in German; *Buxbom* in Swedish and Danish; *Buis* or *Bouis* in French; *Busso* or *Bosso* in Italian; *Box* in Spanish; *Bucho* or *Buxo* in Portugueze. The Russians have adopted *Samsebit* from the Tartars. In Persian it is *Schimschat;* in Turkish *Tschemtschir.* In Japonese *Ko tsuge.* In Chinese *Huynh duong.* In Cochinchinese *Hoam tuon.*

PROPAGATION AND CULTURE.

All the varieties of Box may be propagated by cuttings planted in autumn in a shady border, observing to keep them watered until they have taken root, when they may be transplanted into the nursery, until they are fit for the purpose intended. (These cuttings may be planted so early as August, but the best time is when the autumnal rains fall, they should be a foot in length, and rather more than half should be planted in the ground, at the distance of four inches from each other. A slip of the last year's wood. stripped from an older branch, is an excellent set, and there is little fear of its growing. The cuttings or slips may stand three years, and then be transplanted into the nursery any time between August and April, choosing moist weather for the purpose, if this work be performed early or late. In the nursery the rows may be two feet asunder, and the plants a foot from each other in the rows.)

They may be propagated by laying down the branches. (This may be done between michaelmas and March; and it is the natural way by which Box frequently propagates itself; for when it breaks down by its own weight, or by a fall of snow, soon after it comes into contact with the ground, it sends forth fibres.)

Box may be propagated by seeds sown soon after they are ripe, in a shady border, and duly watered in dry weather. This is the best method to raise large trees. (The best soil for the seeds is a light loam or sand, and they should be sown half an inch deep. They will come up in the spring, though probably many will lie in the ground to a second season. They should stand two or three years in the seed-bed; and when they are strong enough to plant out, they may be removed into the nursery, and placed at the same distance as was prescribed for the cuttings.)

The best season for removing this tree is October, though it may be transplanted almost at any time, except in summer, if it be taken up with a good ball of earth.

Dwarf Box is increased by parting the roots or planting the slips; but as it makes so great an increase of itself, and so easily parts, it is hardly worth while to plant the slips that have no roots. It is so common that it may be purchased from the nurseries at a cheap rate. The manner of planting it in edgings is well understood by every working gardener.

BOXWOOD GARDENS

Old and New

by Albert Addison Lewis

(Excerpts from Mr. Lewis' book, by the same title, published by The William Byrd Press, Inc., of Richmond, Virginia, in 1924. Some excerpts from this book appeared in the January 1963, issue, and it is expected that still others will appear in later issues of The Bulletin.)

FOREWORD

Mr. Lewis has rendered American gardens a unique service. Moved by a love of Boxwood and by a consciousness of its historical and traditional background, he has rescued thousands of priceless and beautiful specimens from oblivion in weed-grown, abandoned gardens and transplanted them to happier settings where they will be nurtured and cherished and appreciated for another century. All Americans who have any reverence or feeling for the adventurous and colorful Colonial days owe him a debt of gratitude for his work in preserving the Boxwood which our forefathers loved so well.

It was difficult to compile this book, however, for though there has been Boxwood back to Bible days and before, the information about it is obscure and scattered. This book attempts to gather all that is known of this old and beautiful plant between two covers.

Thanks are due to the James River Garden Club, who have been kind enough to allow the use of many illustrations from their beautiful book, "Historic Gardens of Virginia," edited by Edith Tunis Sale.

We are indebted to this book also for much unusual historical data which would otherwise not have been available. Neither must we neglect many country-estate owners who have appreciated Boxwood and who have permitted us to use photographs of their plantings.

Then a word of gratitude should go to the many splendid men who are endeavoring to make American landscape architecture a beautiful and perfect art. There are James L. Greenleaf, Olmstead Bros., Thomas Hastings, Vitale, Brinckerhoff and Geiffert, and Jacques Greber of Paris — all have used Boxwood extensively in their efforts to produce gardens that typify the best in American spirit and tradition.

Old Boxwood is an American heritage, and specimens should be collected and cherished like so much rare old furniture, historical silver, or any other museum piece. It is the most beautiful and permanent garden inheritance in the country.

INTRODUCTION

The very name of this book — Boxwood Gardens, Old and New — is entrancing. Old Box holds the charm of romantic environment and new Box brings the promise of romance to come.

Gardens enriched with this aristocratic shrub carry memory back over hundreds of years to the age that its first shoot was firmly rooted in the heart of the human family; the age of crusading knights and warriors bold; of despotic kings and haughty queens who held no garden to be complete without rare hedges of topiary box.

Many garden lovers have with knowledge and skill told the stories of the world's best gardens; but to Mr. Lewis has been left the important task of writing the story of Boxwood alone. Beyond its historical interest, his book is offered with the hope that the comparison of the old with the new box gardens may be of real practical assistance. Many of the illustrations present examples of successful results obtained by moving to new and more congenial surroundings old Boxwood which, regardless of inattention and neglect, has survived the holocaust of time to transfuse into its latter day resting place its early romantic charm.

An immense wave of interest in Boxwood is now sweeping over America where only a few years ago seemed to be complete indifference and neglect. The Boxwood Epic that is here told in text and illustrations — an epic which in lore and legend is more inspiring to garden lovers than that of any other shrub or tree or flower — shows how tangible is the fascination for the invincible green of this shrub.

It is satisfying, thinking of Box gardens, that the old gardens of Rome, the gardens of Italy, are brought before one in these pages; that the Box hedges of the old Monks, the parterres of Spain and France, the best of the English and other old World gardens, the most interesting American gardens, are brought before us in all the witchery of their fragrance.

Mr. Lewis in his zest for the true story of Boxwood takes us into major gardens only, those most beautiful among the old and the important ones that are new; with great sympathy he compares them as a study. But these far scattered gardens are inaccessible to the average traveler or reader and the existence of many of them is known only to a few enthusiasts. No attempt has hitherto been made to gather them all into one volume with the purpose of giving a picture as interesting to the landscape gardener as to the dreamiest romanticist. This tremendous task has necessitated much traveling and careful research and the author has spared no pains to authenticate what he writes.

Not withstanding the lamentable destruction of many fine old Southern gardens, America is still rich in its possession of priceless Box, in gardens which, in this Renaissance of Boxwood, are being hunted out day after day for all of their early romance and much of their former charm.

Through the pages of this book, the author makes it possible for us to find both the romance and charm, to forget the present and live over again the precious days of long ago when lords and ladies reigned supreme, when duels were fought in the name of honour and trysts were kept in the cause of love, when some hearts were broken and some hearts were healed in the moondappled shadows of Boxwood tunnels.

EDITH TUNIS SALE.

WILLIAMSVILLE AND ITS GARDEN

JUST fourteen miles from Richmond, there stands a gallant old homestead named Williamsville, surrounded by a garden that has flourished since Colonial days. That venerable garden, shaggy with ancient Boxwood, has played its part in our national history.

Its first owner was William Pollard, a fiery Revolutionist, who drew up documents for Hanover County in 1774, instructing Patrick Henry to vote for the independence of the Colonies. A section from these defiant resolutions reads: "We are free men; we have a right to be so. Let it suffice to say once for all, we will never be taxed but by our own representatives."

As soon as the war was over, William Pollard, called "Billy Particular" because he was so good a manager, bent his energies to building beautiful Williamsville, and laying out its acre of garden, its rolling lawns, its gravelled Boxwood walkways. Here gathered other Revolutionists and statesmen of those thrilling early days to talk over policies and to discuss the many problems of the infant nation. One can picture them after a long conference in the panelled drawing-room at Williamsville, going out into the cool of the garden, strolling gravely along those famous Box alleys to rest in one of the white-columned summer-houses.

Later in the sad days of the Civil War, General Hancock was forced to seize Williamsville in his advance against the South. It was cruel to see the business of war disrupting that peaceful spot, earthworks thrown up hastily on the rose beds and tulip borders, and passageways gouged through those perfect Boxwood borders, cherished by the Pollard family through generations as the glory of the garden.

Now little remains of the ravages of the war. Time has healed the scars, and serenity pervades the paths again. And still the rugged Box grows strong and everlastingly, the soldier passageways grown into arches of rare beauty.

LOWER BRANDON

EIGHT generations have lived and died since John Martin first came to Lower Brandon, and hewed from the tangled wilderness one of the most beautiful gardens in the world. It was a hospitable, ample, colorful plot, cleared from the gloom of virgin forests and stretching sunnily down to the James River, wild and wide, where Indians scuttled away in their canoes before the white settlers.

John Martin had come over with John Martin as a member of His Majesty's first council in Virginia. Of course, no garden is worthy of the name in England unless it grows Boxwood — dwarf Box for borders, great Box for enclosing walls, tree Box for sentinels at garden gates. So John Martin planted the loved Boxwood in his garden, a double row across the front of his great and beautiful house, a double line extending down the sides of the grounds, and an intricate maze of bush Box in a quaint pattern reminiscent of formal European plantings.

It is natural that John Martin thought first of Boxwood when he wanted to take the frontier crudeness from his new world home, for there is something so sturdy and settled and strong about Boxwood that merely a few clumps can give to a whole garden an atmosphere of having been rooted there for years.

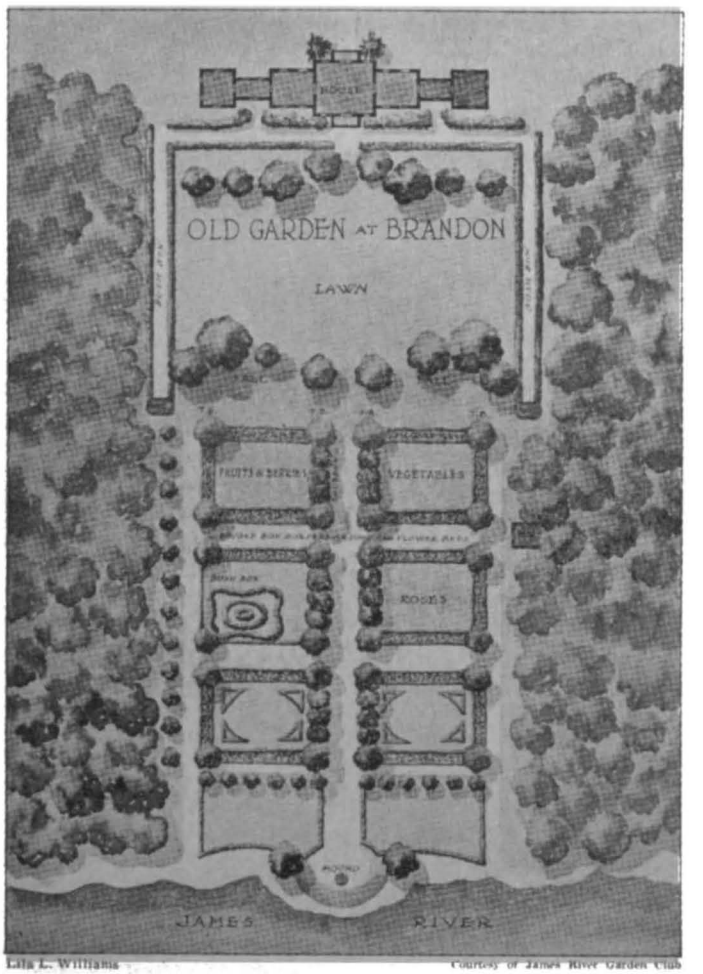
These ancient Box hedges that John Martin set out so many summers ago have grown to unbelievable loveliness with the passing of time. Some have assumed queer shapes, guarled and twisted and fantastic, until they look older than history. Other clumps have kept their symmetry, but spread to tremendous size, great venerable monuments to long ago. It is impossible to walk down the famous grass path at Brandon, surrounded by the tropical abundance of that garden, breathing the fragrance of thousands of flowers, permeated always by the delicious scent of Box, without feeling your imagination going back three hundred years to those romantic early days in the James River.

It is interesting that in 1635 Lower Brandon and its glorious garden were granted to "John Sadler and Richard Quiney, merchants, and to William Barbour, Mariner," for Richard Quiney was the husband of Judith, daughter of Will Shakespeare. One wonders what art would have flowed from Shakespeare's pen, could he have lived to cross the seas and stroll in that inspiring garden at Brandon. For surely.

> "How sweet the moonlight sleeps upon this bank" of the old James, where myriad blooms waft their fragrance to the stars! Surely there would have been the tenderest of lovers' meeting in this idyllic setting — and perhaps another "Midsummer Night's Dream" with saucy elves and dainty fairies skipping in and out from behind the great Boxwood!

Richard Quiney left his share of the property to a greatnephew, Robert Richardson, who sold it to Nathaniel Harrison. Generations of his descendants have lived in the fine old house and loved that most beautiful of gardens.

Hanging from the drawing-room chandelier is a small gold wedding ring. No one knows when or why it was hung there, but it is always reverenced. The legends are two: one, that some bride cast it off because of a secret love; the other, that some dear old grandmother left it as a sign of happy union in the room where she was married.



Lila L. Williams — Courtesy of James River Garden Club

Every old Virginia place has its ghost, and the ghost at Brandon is the lovely bride who returns to her ring to bless her descendants. It is pleasant to think of this "patron saint of brides" frequenting the misty, moonlit paths in the garden in Brandon.

THE LABYRINTH AT UPPER BRANDON

THE garden at Upper Brandon was built several generations later than Brandon, Shirley and Westover, but still it is of a worthy age, for it was full-grown and flourishing at the time of the Civil War. William Byrd Harrison, who built the house, was the son of Benjamin Harrison of Brandon and when his father gave him part of the estate, he copied the house and half of the garden after his old home.

The house rises, wide-winged and commanding, from a knoll far back from the river in a grove of trees. The early Virginians with their instinct for the impressive, placed their houses well.

But the unusual feature is the lower part of the garden where the Harrisons established a serpentine Box walk, of rare and old design, said to be the only one of its kind in America.

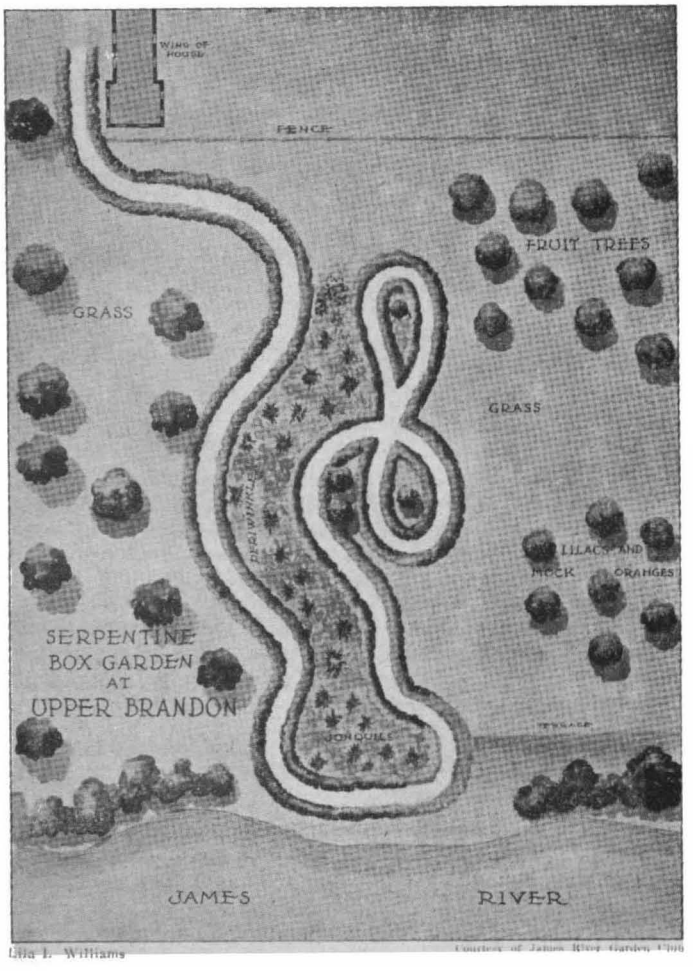
The labyrinth or maze is one of the most ancient features of gardening, and is one of the "anticke works" recommended in the earliest treatises on gardening.

Didymus Mountain says that it is not "any necessarie commoditie in a garden, rather as a beautifying unto your garden: for that mazes and knots aptly made doe much set forth a garden." Such was its first purpose — to display a deal of gardener's skill in small space. The first Box labyrinth probably had origin in the crowded courtyard of a mediaeval castle.

A labyrinth should be constructed of hedges "to a man's height," for in the finest of them, you could stroll along the interminable bends and twists without being seen by another person four feet away on the other side of the hedge. Box was especially suited for the purpose, being of so substantial and opaque a growth.

Later, however, the purpose of the maze became more sportive. It was considered a huge joke in the Middle Ages to turn a guest into a labyrinth, so cross-cut with circuitous paths that he would be hours finding his way out. Certain wits of the day were wont to place surprises for guests at bends in the maze. One such is a fountain which sent an unexpected spray across a sharp turn, so that the unwary guest was drenched. 'Twas fine fun for the ladies and squires to lean from turret windows overlooking the garden and shout derision at the poor victim.

So Didymus Mountain suggests putting the maze in a "void place that may be spared for the only purpose to sport in it at time." It is Mountain, too, who suggests the planting of luscious berries at bends in the labyrinth so that the stranger may be enticed so far into it that he loses himself.



Lila L. Williams

As manners grew more gentle, this crude horseplay purpose was forgotten, and the tortuous paths of the labyrinth were merely to entertain and divert. True, there was one rather sinister labyrinth in a Boston garden, where a jealous husband confined his wife, whom he suspected of infidelity. He said that the maze would give her restless feet plenty of variety in her own garden. But most of the mazes of the last three centuries have been created to make beautiful and interesting a stretch of garden with no other outstanding feature.

Such is the lovely serpentine garden at Upper Brandon, that maze enclosed in aromatic walls of evergreen Boxwood, over which one can look into a stretch of grass, thick sown with jonquils and periwinkle. When one walks there he concludes that truly the labyrinth is what an old writer calls it, "a delyghtsome conceit."

SHIRLEY

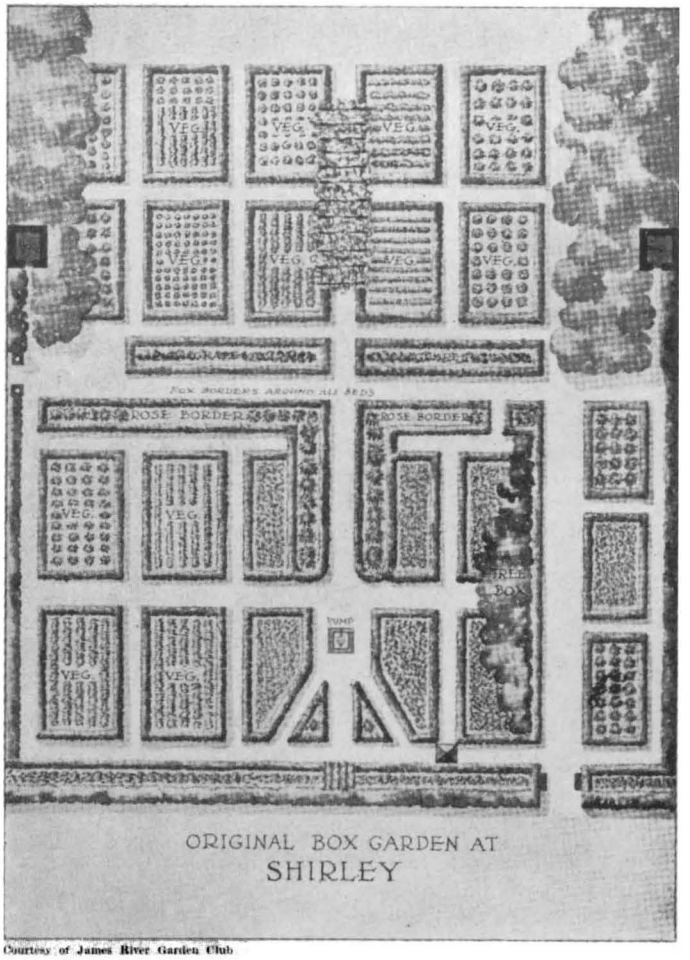
IF one is interested in reproducing a Colonial garden of the finest type he could have no better model than the beautiful garden at Shirley, the original home of the Carters. It is an old garden, for its cheery Box borders were thriving long before the Revolution. The Carters were a wealthy family and an aristocratic one. Their home was huge and handsome and their landscaping was in accord with their position and breeding.

The garden at Shirley follows the best Renaissance traditions and is enclosed in a tall Box hedge, carved into a graceful arch over the grey wicket that leads within. This hedge at irregular intervals is o'ertopped by stalwart oaks and elms, and replaced entirely at the ends by the shaggy luxuriance of great Box trees. Bright flowers, rainbow-hued, are massed along the base of the hedge. There one has all the elements of a masterpiece, vivid color against the greent of oaks and elms and of the Box. It takes the lighter green of deciduous trees against darker shading of evergreens to give the "highlights" to a garden-picture, to paint in the glow and the shadow that are equally necessary for balance and for emphasis. And if the evergreen be omitted, even the height of summer's growth will lack the satisfaction and the depth that old Boxwood gives to the garden-picture.

There is a grape arbor leading through the Box-bordered vegetable squares to the garden center, which is a bower of roses of every kind and color. The perfume of that path, the scent of roses, the spiciness of Box, the sweetness of grape-blossoms (do you know it?) is ineffably lovely, and should be imitated by all who like to breathe a garden as well as see it.

At the end of the rose-beds is an old well, mossy and cool, with its well-sweep ready over it. There is a rule which says that any decoration must be useful if it is to be artistic. Certainly a well or a fountain or a spring is a decorative addition to a garden where thirsty flowers are so freshly grateful for cool draughts at evening.

All about the ancient well are Box-framed beds of old-fashioned blossoms, heliotrope, rose-geranium, mignonette, lilies — beds of sweetness. A tremendous and venerable pecan tree spreads its shade



ORIGINAL BOX GARDEN AT SHIRLEY

Courtesy of James River Garden Club

over the path here, a tree which John Randolph of Roanoke planted when on a visit to the Carters in the early days. Thus did one Virginia gentleman repay hospitality with a gift which has lived two centuries and more!

The best Colonial gardens always contained plots for vegetables and small fruits, but when rich Box bordered the squares and flowers bloomed occasionally throughout them, they were as attractive as any part of the planting. There was always, too, a herb garden, a space where "simples for medicines and flavorings were carefully tended and culled and dried by thrifty housewives.

In the corners were groups of fruit trees, delightful when in bloom, and charming when their bright burdens sparkled through the leaves in the fall of the year.

Every element necessary for comfort and for beauty is in that garden. It is a complete perfection, that bower, Box-enclosed. Landon Randolph Dashiell has expressed it fittingly in "Historic Gardens of Virginia": "In the early morning, in the long noonday, in the cool of the evening, the garden at Shirley is a place of refuge, solace and happiness; the atmosphere is laden with the fragrance of Boxwood; birds, bees, and butterflies are there; their confidence in the Infinite provision is exemplified as though their Creator had spoken."

THE OLD MANSION AT CLAREMONT

ONE of the richest sections of America in historic interest where there are still standing many homes, churches, and tombs, filled with interest about Jefferson, Marshall and Bacon and Sir John Hurvey, governor of Virginia in 1632, is the historic city of Williamsburg.

Near Williamsburg, located below Richmond on the James River, is Claremont. Quoting from the beautiful book "Historic Gardens of Virginia," published by the James River Garden Club and edited by Edith Tunis Sale:

"The romantic legend, told along the river, is that two brothers, Allen and Eric Guelph, princes of the house of Hanover, were rivals for the love of a high-born English lady. Eric was successful in his suit, but on his wedding night was fatally stabbed by his brother, Arthur, who then fled from England. Taking refuge in America, he is said to have changed his name to Arthur Allen, in which name he held the large grant of land given him in 1649. Upon this plantation, a few years later, he built the house known as Claremont Manor, which today is an excellent example of the best architecture of the seventeenth century."

Claremont mansion is designed like the Claremont mansion in England, which was the home of the Duke of Kent, father of Queen Victoria. Edgar Allan Poe was a frequent visitor to Claremont Manor, and each President of the United States prior to the Civil War is said to have been a guest at the Claremont house.

PATRICK HENRY'S LAST GARDEN

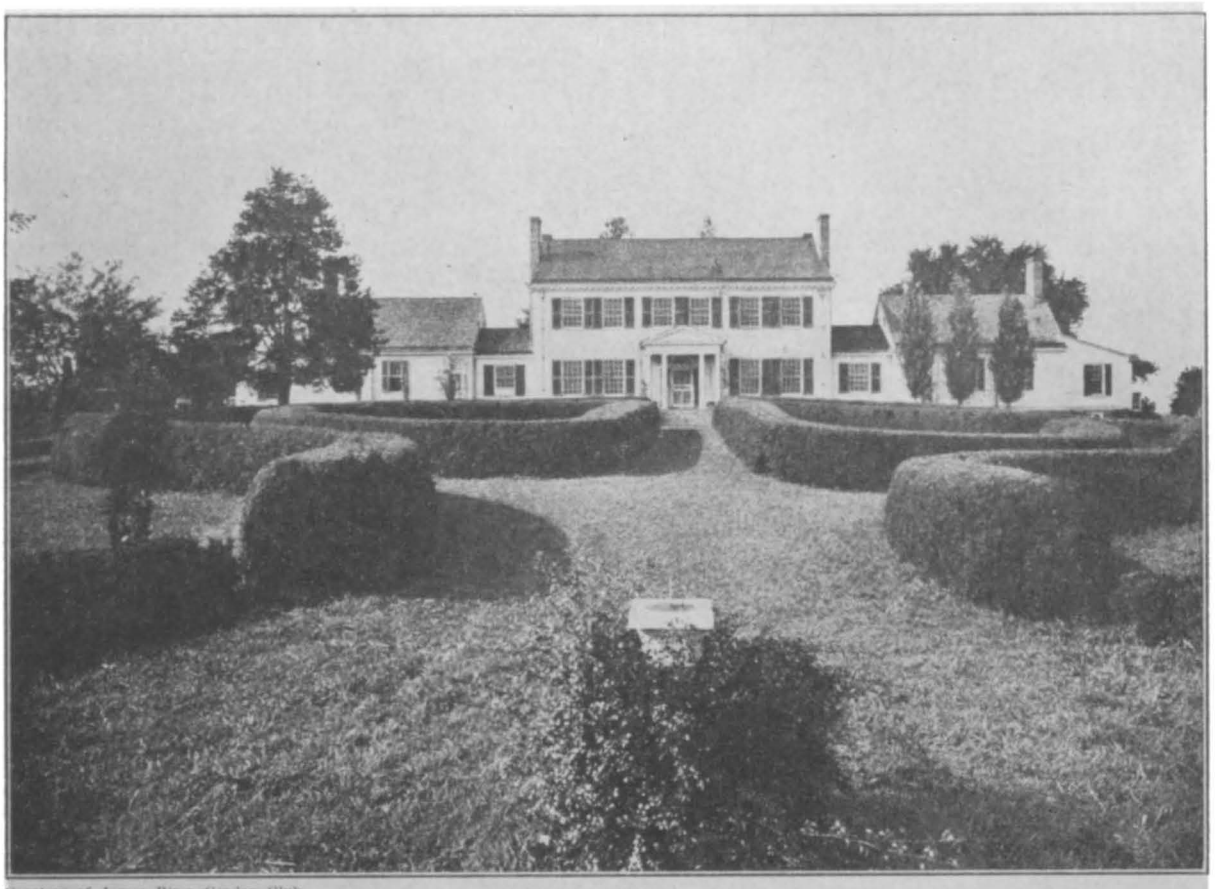
"GIVE me liberty, or give me death!" — that trumpet call with which Patrick Henry stirred so many fearful colonists to action is still thrilling.

But the fiery orator had another side, less known, which was really more characteristic, a lovable, genial, domestic side. Thomas Jefferson became his friend in 1760, when a student in the College of William and Mary. He writes of him:

"His passion was music, dancing, and pleasantry. He excelled in the last and it attached every one to him."

It was this gentler side of his nature which he had opportunity to indulge in those last peaceful days at Red Hill, when the strife of the Revolution was passed and gone, and the business of starting the new States in independence was under way. Patrick Henry had been Governor of Virginia for three terms, and now the State he had loved and served was able to do without him. He withdrew to the quietness of Red Hill and lived there the pleasant life of a patriarch.

His days were simple and orderly. He liked to call his slaves together in the morning on the lawn, a carpet of green enclosed in close-clipped Box hedges that spread along the Staunton River. Here he would deliver the orders for the day in that ringing voice of his which, it is said, could have been heard by ten thousand people out of doors. It was perhaps a little daily reminiscence of the glorious power that vibrant voice had wielded to strengthen the colonies to a stand for right.



Courtesy of James River Garden Club

Red Hill, the Home of Patrick Henry—Original House on the Left

After the slaves had scattered to their tasks he would walk along the Box-edged paths which led in every direction from the homestead, until he reached the Spring House, where he would dip with the gourd he always carried into the clear, bubbling waters. For Patrick Henry was so disgusted and amazed by the widespread outbreak of drunkenness and license that followed the Revolution that he never would drink intoxicating liquor again; and as Governor of Virginia, he served only a mild barley beer at official dinners, in the hope of influencing the public to moderation.

Then he would return to an eminence on the lawn, where a Box-circle marked a pleasant space beneath a sprawling old locust tree. Here he would sit for hours, his chair tipped back against the great trunk, a book unopened in his lap, his fiddle at hand for occasional tunes, dreamily drinking in the sunshine and the warm, aromatic breath of the Boxwood all about.

Patrick Henry loved the Box above every plant and his garden and lawn were full of it in all varieties to the exclusion of almost everything else. His hedges were remarkably fine, for they were not of the customary dwarf Box, but rather of tree Box clipped and kept short.

Another fascinating experiment of Patrick Henry's with Boxwood was the planting of four large Box trees at the garden entrance, so arranged that the tops grew together into a deep green cover. Over this he trained the yellow jessamine, and now it blooms unseen in the tops of the Box trees, sending forth a hidden, heavenly fragrance, that comes an unexpected delight mingled with the keenness of the Box.

The uncle who educated Patrick Henry taught him these maxims of conduct: "To be true and just in all my dealings, to bear no malice nor hatred in my heart. Not to convert other men's goods; but to learn and labor truly to get my own living, and to do my duty in that state of life into which it shall please God to call me."

The graveyard at Red Hill where the fine old man now sleeps is fitting for one who lived according to so upright a rule of life. It is a quiet square, aloof and tranquil, where the simple tombs of Patrick Henry and Dorothea, his wife, are spread about by an evergreen carpet of periwinkle. And all around that resting place there stands a border of his favorite Boxwood, an ever-renewing symbol of the immortality of a noble life.

PROGRAM

Annual Meeting — May 15, 1963

10:30 A.M. (E.S.T.) Registration begins

10-12 A.M. Tours:
- Arboretum
- Greenhouse
- Radiation Facility
- Laboratories
- Boxwood
- Seedlings
- Specimen Plants
- Herbarium Vouchers
- Literature, etc.

Exchange experiences, renew friendships.

10:45 A.M. Directors Meeting (Blandy Library)

12 Noon. Lunch
(NOTICE: Please write Box 85, Boyce, Virginia, reserving a box lunch — probably again featuring Kentucky fried chicken, if such is desired. The luncheons will probably be $1.50 each.)

1:30 P.M. (E.S.T.) The Formal Program
Admiral Neill Phillips, President, presiding.

1. Business Period
   Reports of Officers.
   Election of Directors and Officers.
   Other business.
2. Dr. George M. Darrow, United States Department of Agriculture
   "Boxwood Breeding and Propagation"
3. Mr. Alden Eaton, Colonial Williamsburg
   "Boxwood in Williamsburg"
4. Dr. Henry T. Skinner, The National Arboretum
   "A Re-Look at Some Boxwood Pest Problems"
5. Prof. A. S. Beecher, Virginia Polytechnic Institute
   "Boxwood in the Landscape"
6. Mr. Cecil F. Carter, National Association of Gardeners
   "A National School for Closing Educational Gaps"
7. Adjournment (about 3 P.M.)
8. Following Adjournment, Admiral and Mrs. Neill Phillips invite the officers, members and friends of the American Boxwood Society to stop by on their way home — to visit the gardens and to have refreshments at Heronwood, near Upperville.

All persons interested in any phase of boxwood are invited to this meeting. Members of the Society will welcome all interested non-members as guests, and as prospective members.

Boyce, Virginia, will still be on Eastern Standard Time on May 15.

Blandy Experimental Farm is on U. S. Route 50, near Boyce, Virginia, and ten miles east of Winchester, Virginia, city limits.

Please make reservations for box lunches (to Box 85, Boyce, Va.) no later than Saturday, May 11.