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TOWARD A PRESERVATION OF THE GROUNDS OF LEMON HILL IN LIGHT OF THEIR PAST AND PRESENT SIGNIFICANCE FOR PHILADELPHIANS

Owen Tasker Robbins

A THESIS

in

The Graduate Program in Historic Preservation

Presented to the faculties of the University of Pennsylvania in Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE

1987

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Advisor

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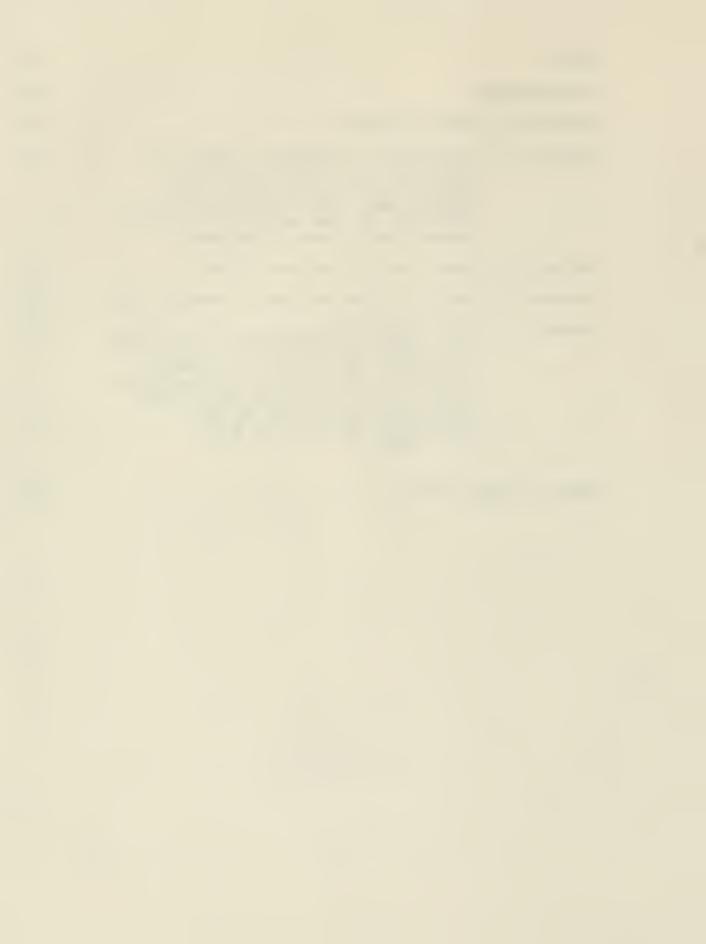
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ACKNOWLEDGEMENTS

The following persons and organizations are noted for their kind assistance in the preparation of this study:

Athenaeum of Philadelphia Bartram's Gardens Ward Childs CIGNA Fairmount Park Commission Geraldine Duclow Kenneth Finkel Free Library of Philadelphia Joel Fry Beatrice Garvan Historical Society of Pennsylvania Jill Hittleman Mrs. E. Norton Hunt David King Mrs. John Kistler Library Company of Philadelphia Jill McConkey John McIlhenny Elizabeth McLean Art Milner Roger Moss Peter Odell Pennsylvania Horticultural Society Charles Peterson Philadelphia City Archives Philadelphia Contributionship Philadelphia Historical Commission Philadelphia Museum of Art Leslie Simon Linda Stanley Robert Taylor George Thomas Thomas & Newswanger, Architects University of Pennsylvania Libraries Carol Woitowicz Ruth Wett

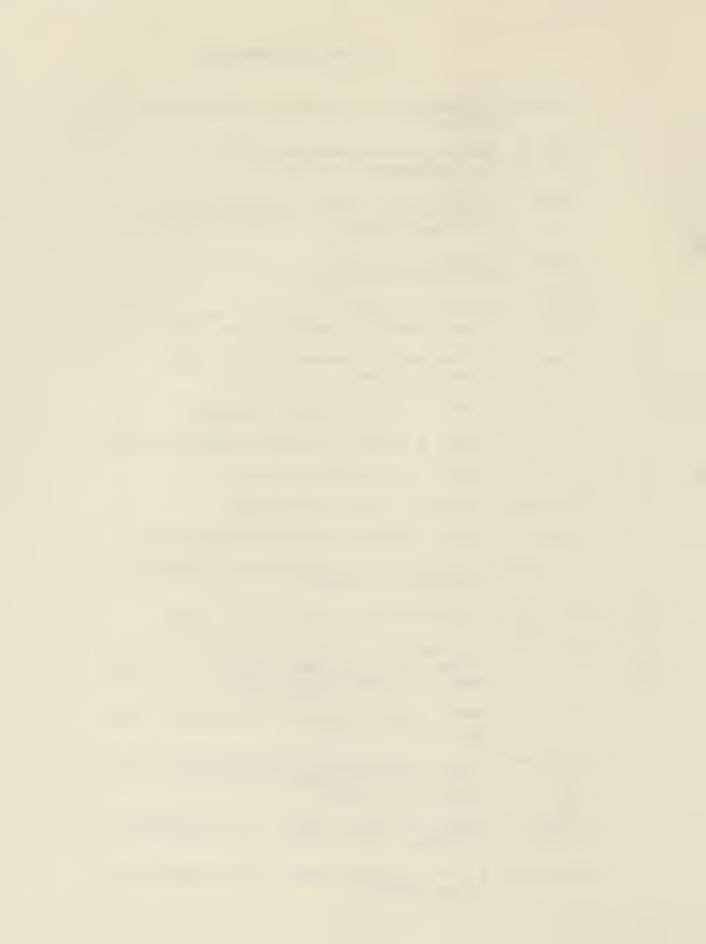
A special note of appreciation to David De Long for his generous assistance as reader for this study,

and heartfelt gratitude to Christa Wilmanns-Wells for her unfailing interest and support toward the successful completion of this thesis. Thank You.

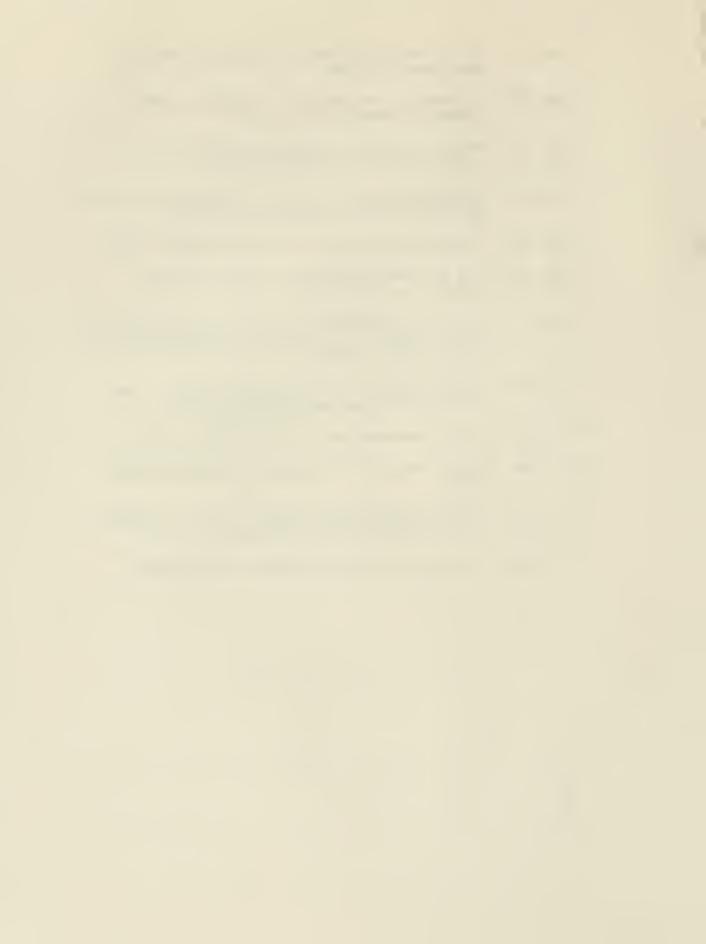


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INTRODUCTION

"... All that Country Seat or Farm or Tract or Piece of Land known as 'Lemon Hill'..."

Today the name "Lemon Hill" is generally applied to the mansion that occupies a portion of the site overlooking the Schuylkill River, located in Philadelphia's Fairmount Park (fig. 1). "Lemon Hill Mansion ... has long been a subject of national interest and local controversy because of the obscurity of its origin." Much of this controversy has centered on whether the present house was indeed built by Robert Morris as his country seat or was a later product by the hand of Henry Pratt. If so, where was Morris's manor, "The Hills"? These are some of the questions which will be addressed in this study as the history of the site is presented.

"Lemon Hill is a graceful masterpiece of late eighteenth century architecture that was the site of one of the
city's finest gardens." These gardens, their design and
associations, and particularly the construction of the
greenhouse once prominently poised above the river, are
topics of focus within this study.

The Lemon Hill estate was the nucleus of Fairmount Park, "... by many considered the world's most beautiful public playground." Or at least it was in 1932, when the above-quoted phrase was written. The park is hardly recognizable as such today. It has fallen victim to monetary



cut-backs and city politics. In an article in <u>CitySITES</u>, Fall 1986, Peter Odell, the Management and Development Administrator for the Fairmount Park Commission, made the following statement:

Since the end of the Second Great War, the Park has been invaded by the Schuylkill Expressway and has countenanced the closing of the Carousels (there were five), the tearing down of Horticulture Hall (San Francisco saved theirs), the closing of the Aquarium (and now Baltimore's is a tourist mecca), the burning down of the Japanese Temple Gate, the abandonment of the Fountains (Welsh, Catholic Temperance, Sea Horse, Rond Point Replicas), the elimination of the Park Guards, the conversion of Memorial Hall into office space and an indoor pool (the plan actually called for a drop ceiling under the dome), the abandoning of The Cliffs, and the taking away of the Park's right to collect fees and put that money back into Park activities.

... Now the Park seems to be the victim of a popular focus based on the belief that water-front development will bring tourism from everywhere, and that Fairmount Park isn't worth investing in. The trouble is that our neighborhoods are served by the existing parks, and just as those neighborhoods are being abandoned so are the parks. We're going to do what we can to save one of this city's greatest assets and have a public park. Without some money, though, it means we're going to have to sell some of the park to save it.

The seriousness of the situation is made evident in the condition of the park houses. There are twenty eighteenthand early nineteenth-century houses in Fairmount Park proper. These historic structures have survived, some for over 200 years, as artifacts of the estates which overlooked the Schuylkill, only to be faced with an uncertain future due to "municipal neglect since at least the 1950s." In 1977



there appeared in the <u>Philadelphia Daily News</u> a series of articles "detailing how park employees and city officials lived rent-free in some of the historic mansions and in other houses of no historic value that were owned by the Park Commission." A scandal ensued; the Commission started charging rent with the result that many of the structures were vacated.

Vacant buildings are an invitation to trouble. Wakefield was the first to be torched, in July of 1985. Less than two weeks later, Greenland, which overlooks the Sckuylkill Expressway in the West Park, was gutted by fire. A simple 1757 Georgian house, The Cliffs, burned in the spring of 1986.

In his article which appeared in the <u>Philadelphia</u>

<u>Inquirer</u> on May 11, 1986, Vernon Loeb observes that "some of the remaining houses are vacant and just as vulnerable as the Cliffs. Others soon will be, and even those that have been kept up fairly well are far from being adequately preserved." 10

A few of these houses have private interest groups looking after them, Lemon Hill included, but even these groups have their problems. According to Mrs. E. Norton Hunt, president of the Colonial Dames of America, Philadel-phia Chapter II, who keep Lemon Hill as their headquarters, they are having a difficult time and have no plans for undertaking any large projects concerning the property.

"Our main objective," said Mrs. Hunt, "is to keep the house



from falling down."11

Yet this particular portion of the earth's surface has a rich past associated with well-known national personalities as well as local events and myths. Its prominent location overlooking the city surely helped spread its fame as a renowned garden spot. The gardens and greenhouses located here were tended by skilled gardeners, many of whom went on to establish successful nurseries, and some even became nationally recognized writers and authorities on the art and science of gardening.

This study is intended to illuminate the illustrious past of the Lemon Hill estate, and to provide solid ground-work for future study and possible restoration of the site.

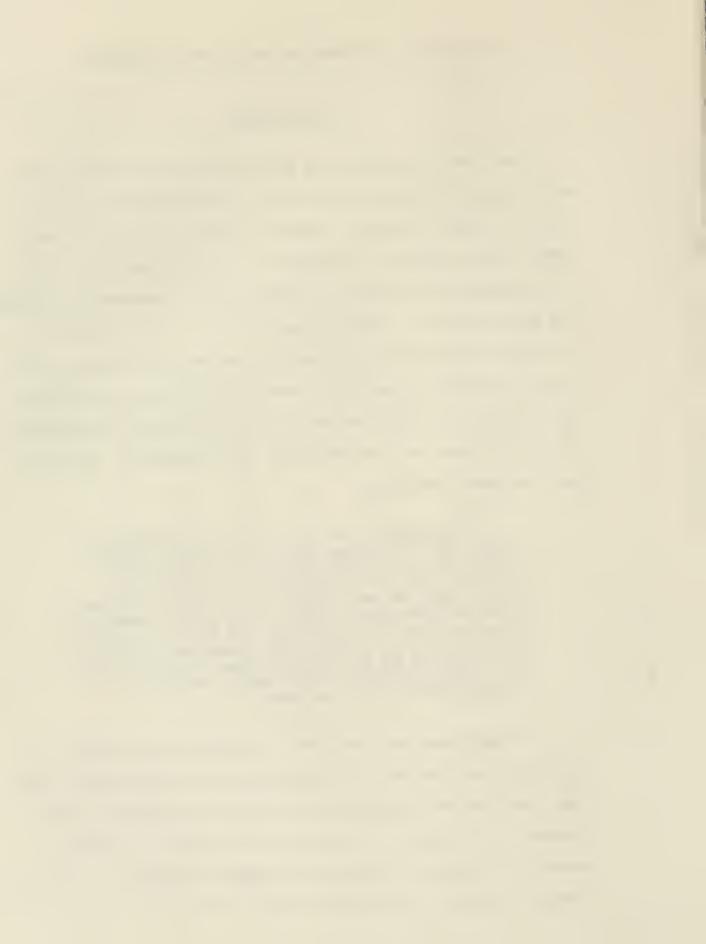


WILLIAM PENN

The land on which Lemon Hill would be built was originally part of William Penn's manor of Springetsbury, portions of which allegedly remained in the Penn family until 1787. Penn apparently attempted to grow grapevines there on the slopes overlooking the Schuylkill, supposedly earning the place the name "Old Vineyard Hill" or "Old Vinegar." He had in mind the development of a winery business in the region, writing around 1686 that "If wine can be made... at the vineyard, it will be worth to the province thousands by the year; there will be hundreds of vineyards." To this end, so the story goes:

The Founder sent a skilful gardener from France and introduced the culture of foreign grapes here, but with no great success. His contributions to the attractions of nature should also be mentioned: he sent from England walnuts, hawthorns, hazels, and fruit trees; a great variety of rare seeds and roots from Maryland, also some panniers of trees and shrubs; and directed by his letters that 'the most beautiful wild flowers of the woods' should be transplanted to his grounds.

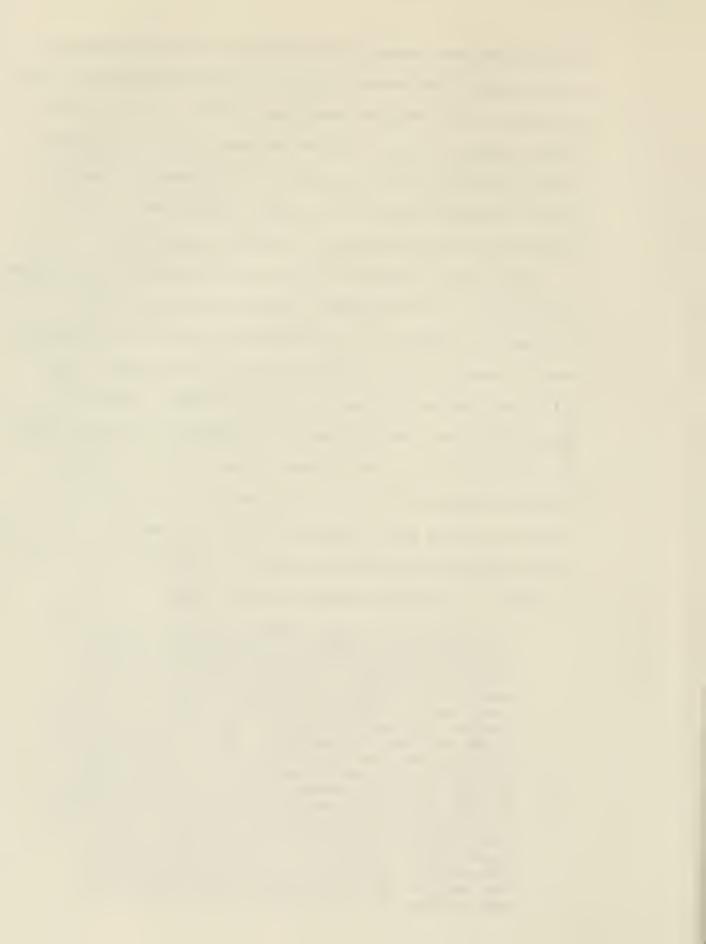
Not only was the tradition of gardening and plant introductions started at the Springetsbury estate, but also the tradition of greenhouse cultivation, one having been erected, it is said, in the early part of the eighteenth century by Margaret Freame, the youngest daughter of William Penn.5 She also, it is told, "laid out a garden in the



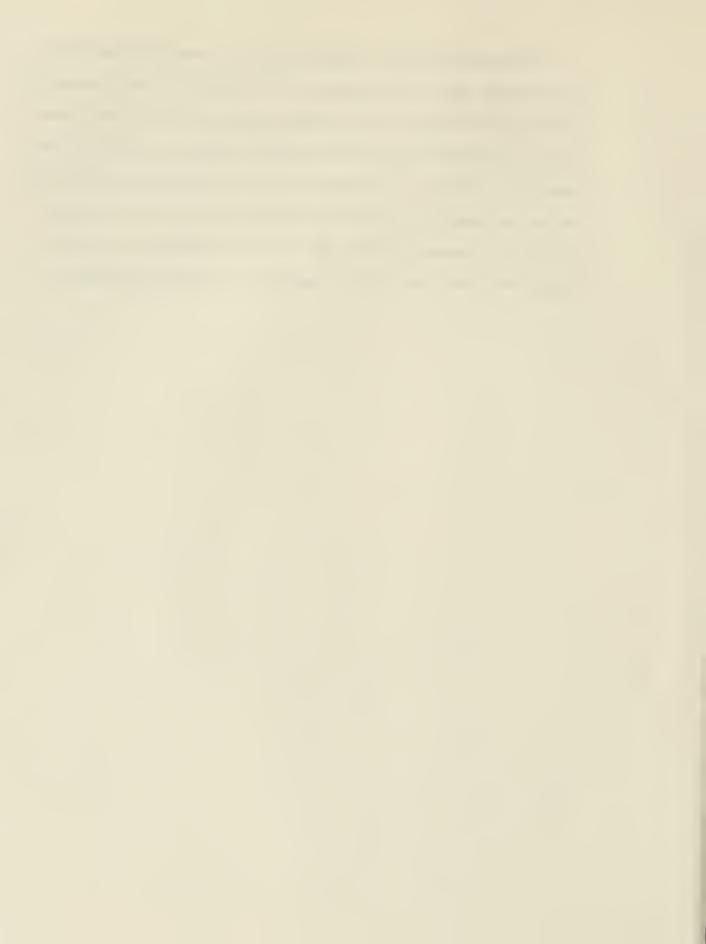
taste which then prevailed in England, of clipped hedges, arbors, and wildernesses, which flourished beautifully till the time of the Revolutionary War **6 Later, in 1777, Virgil Warden, "an old colored servant," had an American aloe blooming in this greenhouse. It apparently "was a great curiosity," which Mr. Warden "exhibited ... to visitors and collected quite a harvest therefrom. **7

The site of Lemon Hill has long been appreciated as the location for a country seat, reportedly starting with William Penn himself. In eighteenth-century Philadelphia, country homes, often in addition to the town-house, were quite the standard for well-to-do gentlemen. "A Map of Philadelphia and Parts Adjacent," produced in Philadelphia in 1742 by N. Scull and G. Heap, shows over two hundred country houses within a ten-mile radius of Philadelphia. With the country seat, the gentleman was expected to improve upon nature by establishing gardens. Writing on this topic in 1806, J. C. Loudon states the following:

Those who enjoy a country residence have an opportunity for adding to the charms of rural scenery, the pleasures resulting from agriculture and gardening. These recreations are almost equally congenial with the human mind, and the pleasure that attends their pursuit is still farther recommended by their utility in life and their influence on society. The cultivation of a garden was the first employment given to man; and agriculture and planting have been pursued by some of the greatest men in every age; many of whom have left ample testimonies of the satisfaction derived from practising those arts. 'God Almighty first planted a garden', says Lord Bacon; 'and indeed it is the purest of human pleasures. It is the greatest refreshment to the spirits of man; without which, buildings and palaces are but gross handyworks'.



Philadelphia had a large number of wealthy landowners who enjoyed this "refreshment of the spirit," and according to Elizabeth McLean: "the country house gardens most associated with Philadelphia were those along the banks of the Schuylkill River. A number of river landscape gardens laid out at mid-century turned the Schuylkill into an elegant stretch of landscape." We turn our attention first to Robert Morris, the great "financier of the Revolution."



ROBERT MORRIS

Robert Morris was born in 1733 in Liverpool, England. When he was 13 years old, his father moved to Oxford, Maryland, and upon his father's death four years later young Morris came to Philadelphia and was given an apprentice position in the counting house of Charles Willing. At 21 years of age, he formed a partnership with Willing's son Thomas and within a few years the firm of Willing and Morris became "the most enterprising and extensive shipping house in the city, and one of the leaders in American business. This partnership, which traded largely with the West Indies, lasted for 39 years, from 1754 to 1793. 14

In 1775 Morris was elected a member of the Assembly of Pennsylvania which in turn chose him as a delegate to the Continental Congress in November of that year. 15 "Like his neighbors, Morris was strongly adverse to a final break with England and did his best to prevent it as a delegate to the Continental Congress, but when the die was cast at Lexington he sided whole-heartedly with the Patriots. 16 On August 2, 1776, he signed the Declaration of Independence.

Revolution" because of his personal monetary efforts during that conflict. "The part he played in the Revolution was an indispensible one, and probably no other man in America had the means, the ability, and the will to do it so well." Toward the end of the war, on February 20, 1781, Morris was appointed Superintendent of Finance, a position supposedly



comparable to today's Secretary of the Treasury, 18 and one which he held until 1784. Morris was also one of the founders of the Bank of Pennsylvania and the Bank of North America. 19

According to one writer, "Morris was probably the most outstanding figure in the country after the Revolution." 20 In 1785 he was among the founding members of the Philadel-phia Society for Promoting Agriculture. 21 He was a delegate to the Constitutional Convention in 1787 and was elected to the United States Congress as one of the two Senators from Pennsylvania. In this position, "Morris was instrumental in having the Capital established in Philadelphia." 22

In addition to his shipping enterprises, Morris took on some partners and became a land speculator. Together they "purchased thousands of lots in the new Federal City, then unnamed and existing on paper only." They reportedly also bought more than 15 million acres of land in Pennsylvania, Massachusetts and elsewhere. 23 This speculation ultimately led to his demise; after years of using his personal wealth to help keep the new Nation's economy afloat, he was unable to do the same for himself, resulting in his spending 3 1/2 years in the debtor's prison on "Pruen", now Locust Street at Sixth.

One might well ask, what kind of man was Robert Morris?

He is most often considered to have been a wise, generous and thoughtful gentleman, and a great hero of the Revolution, who was caught in unfortunate circumstances at the end



of his illustrious life. Writing in his Annals of Philadelphia and Pennsylvania in 1905, John Watson states: "It is
evident to those who trace Mr. Morris's character that he
was a man of liberal mind, great vigor, and of such energy
that he dared to grasp and carry through schemes from which
men of smaller calibre would shrink." Oberholtzer, in his
Life of Robert Morris, claims that "the Morrises were always
good livers. They gave no thought to the cost of their
houses, furniture, wines, or foods" Indeed, according to his ledger books, Morris was paying for his son's
dance lessons and importing the finest of wines from France,
even during the time of his imprisonment.

"Mr. Morris was not only very hospitable, but, it was said, an extremely agreeable companion," wrote Francis J. Fisher in his memoirs. 26 But Mr. Fisher goes on to relate his own view of Robert Morris as follows:

Mr. Morris was a man of very loose morality. He was the illegitimate son of an English merchant, commanding his own vessel, accidentally killed by the wadding of a gun, discharged in his honour in the Chesapeake. The deceased had business relations with Charles Willing, who took the son into his Counting-house as an apprentice, and gave him a home at his house, where my great-grand-mother treated him with a maternal kindness, which he seemed, in her old age, to have forgotten. He had a mistress, I presume, before marriage, by whom he had children, whom he educated and provided for, but not under his own name.... His legitimate descendants, at least the males, were far less worthy. His eldest son committed forgery and fled. Charles died a drunkard on the Market shambles. Thomas was a defaulting Marshal, and established a very bad name in a law-suit with his brotherin-law, Mr. Nixon, a shame to both of them.



...The youngest son, Henry, struggled hard with adversity, and left no inheritance but his own honest name to worthy descendants, some now supporting themselves by keeping a select board-

ing house.

How far qualities are transmitted from fathers to their descendants in their blood, is a matter of dispute. In this instance this was bad, not only in his business habits and reckless expenditure, but in his Epicurian life, and his coarse conversation, for it is traditional that his after-dinner talk was often very unfit for modest youth to hear, somewhat the fashion of the day, but none the less pernicious in its influence.

I should be sorry to publish what I have set down, as coming from what I believe unquestionable authority.

J. Francis Fisher is probably relating stories heard from his grandfather, Francis, whom he writes was at one time a good friend of Mr. Morris, but who was one of many who suffered financially as a result of Morris's bankruptcy. Mr. Fisher's writings make interesting reading, but should be taken with a few grains of salt, as he also claims that his grandfather sold "The Hills" to Robert Morris in 1794.

The Hills.

The tract of land now known as "Lemon Hill" was actual—ly sold to Robert Morris by Tench Francis on July 17, 1770, after it had passed through numerous ownerships [see Appendix A]. Morris's original purchase of two lots, together containing 44 acres and 141 perches, was made "in consideration of the ... sum of Eighteen Hundred and twenty one pounds nineteen shillings and six pence lawful money of Pennsylvania"²⁷ Through subsequent purchases Robert



Morris increased his country seat, which he called "The Hills," to 300 acres of land (fig. 2). 28

Thompson Westcott offers us the following romanticised account of this land at the time of Morris's purchase:

The site was one of the most beautiful in the neighborhood of the city. The banks of the river were high and well wooded, and from any point of the estate near the bank of the Schuyl-kill beautiful views were afforded of the scenery, whilst on the south, at the Upper Ferry, there was sufficient activity to lend a little life to the panorama.²⁹

Morris established a farm and apparently erected some structures in which he was entertaining guests by 1774. 30

There is no mention in the deed of any buildings of any kind, unless they are included in the term "improvements."

Not long after the establishment of this country seat the Revolution began, and Philadelphia and The Hills were threatened with occupation by the British. In a letter dated December 29, 1776, Morris states: "I have always been satisfied with Philadelphia and The Hills. At the same time, I have been constantly prepared, my things packed up, horses and carriages ready at any moment. I dine at The Hills to-day, and have done so every Sunday. Thus, you see, I continue my old practice of mixing business with pleasure; I have ever found them useful to each other. 31

A few months later, Mrs. Robert Morris (Mary White) wrote her mother:



I am yet on dear Philadelphia ground, but expect soon to inhabit the Hills, where we shall remain, if possible, in the enjoyment of all that's beautiful to the eye and grateful to the taste; for as if to add to our mortification, we are obliged to leave it, nature never appeared there so lovely, nor promised such a profusion of her gifts.

Eventually the Morrises did leave the area upon the advance of General Howe in 1777, and, according to legend, "the British soldiers moved in and stationed an outpost there." Josiah Bartlett, writing to Colonel Langdon on July 13, 1778, after the British troops evacuated Philadelphia, observed that "the country Northward of the City for several miles is one common waste.... Mr. Dickinson and Morris's fine seats all Demolished." 34

Exactly when Robert Morris rebuilt his country estate is not clear, but there are references relating that the Morrises spent the summer of 1781 at Springettsbury, "a country house built by Thomas Penn not far from Bush Hill, presumably because they could not yet occupy The Hills." 35 Later, upon visiting the area in 1787, Rev. Manassah Cutler, a botanist from New England, reported that the estate was as of then still unfinished, giving the following account:

We continued our route in view of the Schuylkill, and up the river several miles, and took a view of a number of Country seats, one belonging to Mr. Robert Morris the American financier who is said to possess the greatest fortune in America. His country seat is not yet completed but it will be superb. It is planned on a large scale, the gardens and walks are extensive and the villa situated on an eminence has a commanding prospect down the Schuylkill to the Delaware. 36



Whatever its state in 1787, several entries in George Washington's diary which he kept while attending the Constitutional Convention in that year, mention visiting the Hills: 37

Sunday, 10. Breakfasted by agreement at Mr. Powels, and, in company with him, rode to see the Botanical Gardens of Mr. Bartram, which, though stored with many curious Trees, shrubs and flowers, was neither large, nor laid out in much taste From hence visited Mr. Powel's farm, after which I went to Mr. Morris' country seat to dinner by appointment, and returned to the city about dark.

Wednesday, 22. Dined at the Hills, Mr. Morris's, and visited at Mr. Powels in the evening.

Sunday, 26. Rode into the country 8 or 10 miles and dined with Mr. Morris at the Hills and spent the evening writing letters.

Sunday, 16. Wrote many letters in the forenoon, dined with Mr. and Mrs. Morris at the Hills and returned to town in the evening.

It would seem that the Morrises enjoyed entertaining other guests at The Hills, allegedly including the Marquis de Lafayette, John Jay, Jefferson, Franklin and Hamilton. 38 The close proximity of this Philadelphia country seat to the city made it possible to take "an easy ride from town for the fashionable afternoon tea, "39 and this fact may help clear up the lingering questions concerning Morris's Hills house.

There are no references from original sources uncovered during this study which show that the Morrises spent any extended length of time at The Hills, such as a summer.

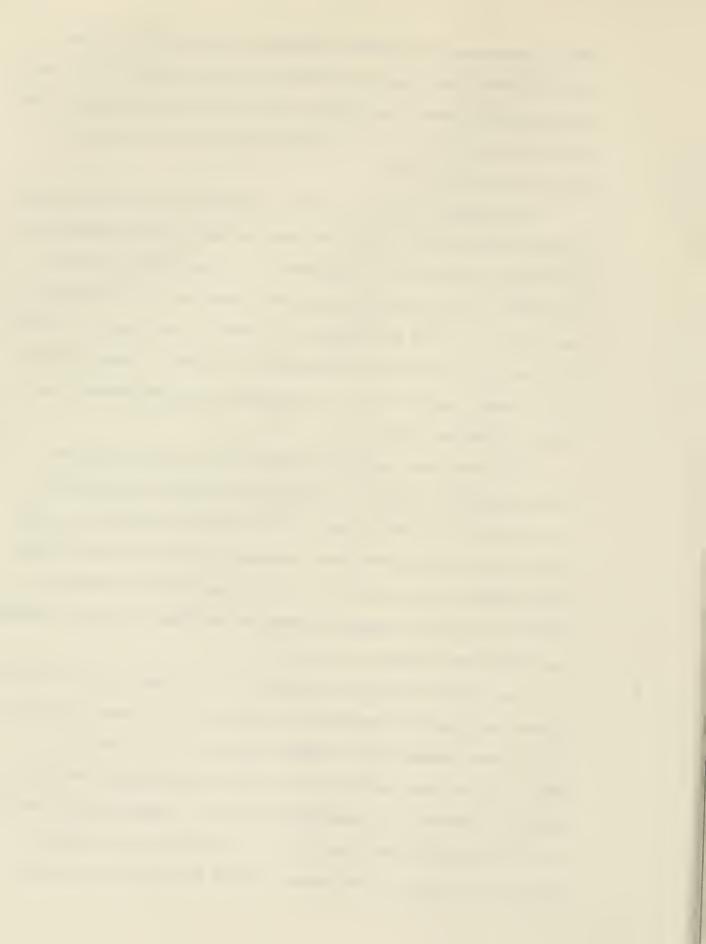


Most references are made to "dining at The Hilis." One writer makes the point that "Morris' letter books show that he had established a working farm there and did no more than visit the place until 1798, when he moved out of town to avoid the sheriff." 40

A secondary account of 1877 concerning the Hills house places the building "near the site of the present Lemon Hill Mansion." This writer continues: "It was north-east of that house, and probably occupied a portion of the plateau upon which in 1876 the Lemon Hill Observatory was built."41 This passage goes on to describe the House; a description which sounds exactly like the present mansion without the stucco covering (fig. 3).

There has been extensive debate for scores of years concerning the origins of the present Lemon Hill Mansion. So extensive is the volume of mis-information that it took over a century for scholars to come to the conclusion that indeed Robert Morris did not build the present mansion. This conclusion is based on combined evidence found in three documents and a tin rain-spout.

The most convincing of these is "A Schedule of Property within the State of Pennsylvania Conveyed by Robert Morris, to the Hon. James Biddle Esqr. and Mr. William Bell, in Trust for the use and account of The Pennsylvania Property Company," dated 1797 [see Appendix B]. Therein are described "an estate called The Hills ... on which are erected a large and elegant greenhouse, with a hot house ... on the



back front a House for a gardener with a kitchen Also on the estate are described a stone farmhouse across the "large garden" from the greenhouse, and a brick farmhouse across the canal, along with other buildings. No mention is made of a manor house or a mansion at that time.

A second document, the Philadelphia County Tax Assessment Ledger, Northern Liberties West, 1795, indicates two dwellings and gives the tenants as William Crouch, Farmer, and someone named Woolf. 43 In 1798, the year Morris moved to the country seat to avoid creditors, the records show him as the occupant of the dwelling formerly occupied by William Crouch. 44 Morris had hired Crouch to oversee the working farm, as indicated by various accounts in Morris's journals. One entry on January 12, 1795, gives the following account: "Estate called the Hills- paid B. Wallaces Acct. of Wages of Brick layers & labourers employed there under direction of the Gardener & Mr. Crouch 45 Since the gardener almost undoubtedly lived in the "House for a gardener" on the back front of the hot-house, it seems most logical that Crouch maintained the farm from the farmhouse adjacent to the garden. The farmhouse complex included a "kitchen, a Springhouse and a granary or store room over it, a Coach house, barn and Stables, large Cowhouse ... a brew house and hogpens. All these buildings are solid and strong, being built of stone, besides which there are sheds and other frame buildings, compleat for a farmer."46

John McIlhenny, historian for the Fairmount Park Com-



mission, believes this farmhouse could be Morris's Hills house where he dined and entertained on his visits to The Hills. 47 Its proximity to town meant the Morrises could visit any time they wished, without the need to stay, even overnight. The Crouches could have served as housekeepers in the building they occupied, perhaps even preparing the meals enjoyed during the Morrises' visits. Perhaps Morris did plan to build a "villa situated on an eminence" at the time of Manassah Cutler's visit and then plans were changed as he became involved in the Delaware Works or his house on Chestnut Street or any number of other projects.

It is not known when this farmhouse disappeared, but reference is made to it in 1859. In their "Description of a Plan for the Improvement of Fairmount Park," Sidney and Adams refer to it in the following manner: "The old cottage near the north end of the old terraced garden may be renovated and embellished as to be made useful as a dwelling." A photograph in the collections of the Fairmount Park Commission shows a small two-story structure and includes the description "An Old House Formerly on the site of Lemon Hill" on the back (fig. 4). This cottage also appears in an engraving on a German/English poster for the Seventh General Singer Festival, held in June, 1857 (fig. 5).

The United States Direct Tax of 1798 must have been taken later in the Northern Liberties, as it lists Henry Pratt as the owner. He purchased the property in 1799. The aforementioned cottage is noted as a two-story stone dwell-



ing house, 20 feet by 15 feet, with a stone kitchen "out-house", 12 feet by 15 feet. Also listed is a 20 foot by 10 foot two-story dwelling house with a 30 foot by 30 foot greenhouse of one story, along with two stone stables, 45 feet by 25 feet and 18 feet by 20 feet.

The Greenhouse.

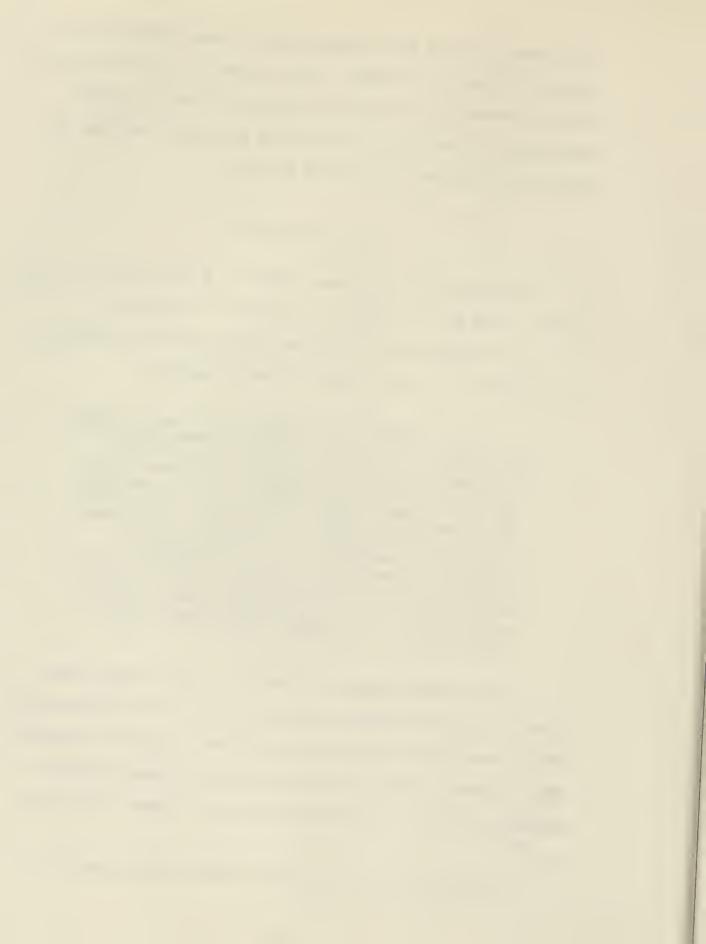
The greenhouse mentioned above is a major focus of this study. When did it appear? When did it disappear?

It is described in the previously mentioned "Schedule of Property" in 1797 in the following manner:

... a large and elegant green-house, with a hot house of fifty foot front on each side, on the back front a House for a gardner with a kitchen, one large and five small rooms, also two large rooms on the back or north front of this hot houses, with an excellent vault under the green house, and a covered room for preserving roots &c in winter; the whole being a strong stone building, with the necessary glasses, casements, fruit trees, plants shrubbs &c in good order; a well of excellent water, with a pump close to the north front the whole enclosed within a large Garden stocked with fruit trees of the best kind &c.&c.

These greenhouses contained the famous lemon trees which have been claimed to be the first in Philadelphia. 50 Many times this story has been refuted, including Deborah Norris Logan's claim that Morris's trees came from the greenhouse of William Logan, stating, "I know this to be so. "51

It was not unusual at this time for "gentlemen of



taste" to build a greenhouse and take up botany. 52 Surely this was considered a sign of achievement and Morris was undoubtedly proud to describe "a large greenhouse with two hot houses as wings each 50 feet long, a Gardeners House, Coal Houses, proper Fireplaces, Flues and everything necessary ... by far the compleatest of anything of the kind in America. "53

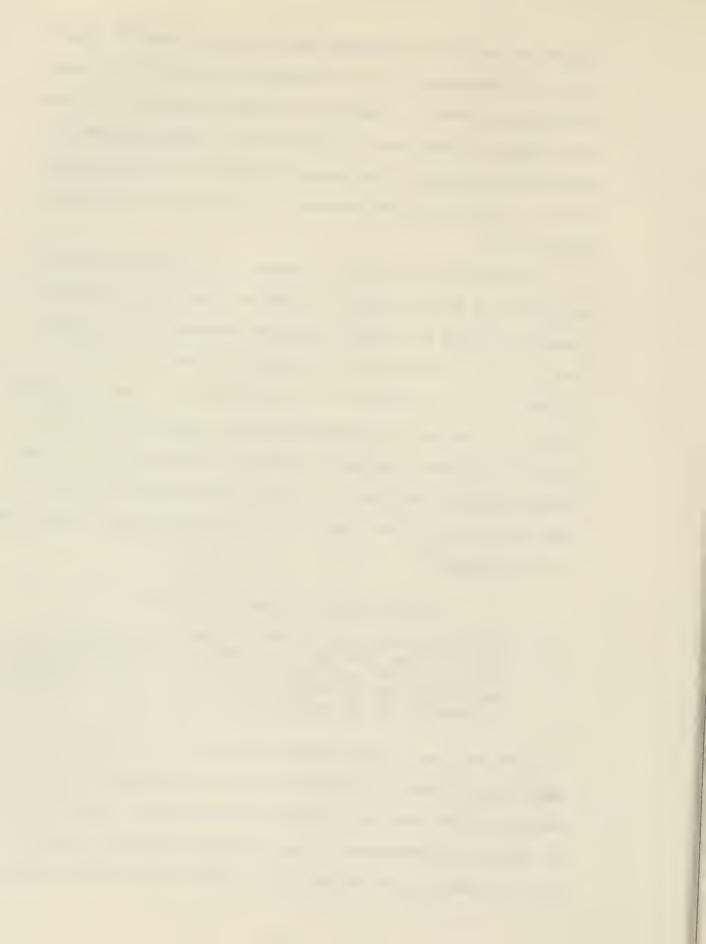
The business ledgers of Robert Morris were studied in an effort to discover any information pertaining to the greenhouses and any other pertinent information regarding the Hills. The results of this study are included in Appendix C. The ledgers in the collection of the Historical Society of Pennsylvania begin in 1791, twenty years after Morris's original purchase. However, there are still some useful entries that refer to late payments made for work done earlier. For our study, the most important of these is the following: 55

Philadelphia August 31st 1792

.184 Sundry Accounts Dr. to Wm. Stiles - Stone Cutter
.242 Estate called the Hills for sundry stone work done by
him at the Hot and Green Houses from October 1784 to
December 1785 p. Accot.

L458..9..1
for amount of his account to January 1786 188.17.11

As this is a rather long period, over one year, and it specifically mentions the hot- and green-houses, it is conceivable that this is the time of the original construction of the said greenhouse. Unfortunately, at this time there are no other records known which would back up this theory.



However, there seems to have been a flurry of activity again in the last half of the year 1791 [see Appendix C]. Entries specifically mentioning the hot house include one for "Iron Work done at the Hot House at the Hills from August to November 1791," 56 for "glazing the Hot & Green House Windows &ca to 31st December 1791," 57 and for "Halling Bricks to hot house at the Hills," paid on June 25th, 1792. 58

Other entries pertaining to the Hills without specifying the hot house, but which are most probably for the same project include the following:⁵⁹

Philadelphia November 26th 1791

.463	Expenses 1791 paid W. Wickershams Accot.	
	for halling bricks to Hills	10194
	paid for Glasses &ca	1176
	paid J. Wilson for Carpenters work	1130
	paid J. McCullocks Acct. for Lumber	
	used at do.	12.10.10
	paid J. Walters bill for sand sent	
	to the Hills	419
	paid Mrs. Morris to pay Rich. Humphre	ys
	for Glasses	84

Philadelphia December 24th 1791

-paid Wm. Lanes bill for 184 bushs. Lime sent to the Hills	1254
Richard Mosely Carpenter paid him on accot. of work at the Hills	710

Philadelphia January 7th 1792

-paid Jacob Graffs bill for Bricks used at the Hills 5.11.0



Philadelphia Novembr. 24th 1792

Sundry Accounts Dr. to Wm. Stiles Stone Cutter Estate called the Hills

for amount of work done there 7..19..0

Philadelphia January 5th 1793

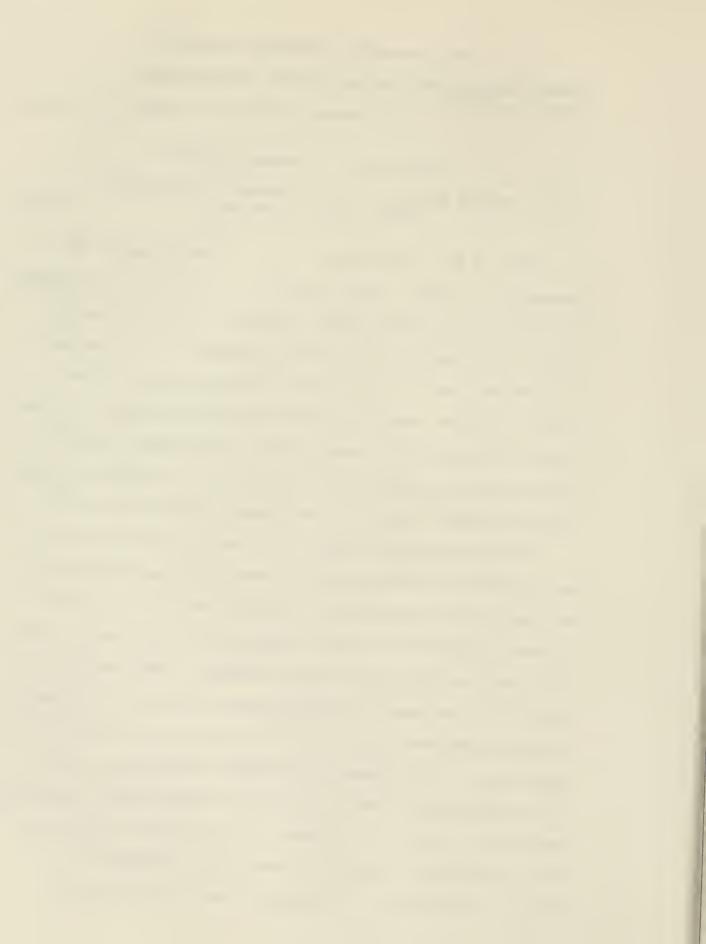
Estate called the Hills paid [Paxton & Richadson accot. for Ironmongery]

1..1..2

One of the most revealing is for "Bricklayers and Labourers," a total of 407 days work at the Hills, "Commencing 23d July and ending 10th December 1791," paid March 11th, 1793. There are also more payments for Carpenter's work (March 19th, 1793), Lumber and Bricks (April 18th, 1793), and Lime "used by Burton Wallace [Bricklayer] at the Hills in February and March Last" (April 29th, 1793).60 A later entry on August 8th of 1798 lists a payment to George Ludlam Plumber, "his bill for glass, Lead &c in 1793."61

Considering these entries as a whole, one might very well reach the conclusion that there was a major expansion project at the greenhouse in the last half of 1791. The payment to the stone cutter (7.19.0) is significantly less than that for the bricklayers (148.18.3). This fact may justifiably be used to undergird the idea that the majority of the greenhouse wings were built of brick, or that Morris was having a new furnace/flue system installed, or both.

Later entries indicate further construction. One dated April 11th, 1796, is a payment to B. Wallace, bricklayer, "for work done at the Green House & Farm House." Two others, both entered on November 25th, 1797, indicate



"Carpenters Work done at the Green House, Wings, Kitchen &c" and "Plaistering the roofs of the Green House Wings, 180 vards ... "63 Was Morris merely sprucing the place up in anticipation of its sale, or was he preparing to move into the Green House to avoid creditors? The reference to "Plaistering the roofs of the Green House Wings" could mean the two large rooms described in the "Schedule of Property", and located on the north side of the hot house wings. Since these rooms were probably built to be utility rooms (potting, etc.) for the hothouses, there would have been no reason to finish the ceilings. If Morris was preparing to use the complex as more than a greenhouse, it is reasonable to consider that he would have taken over the gardener's quarters and finished off additional available space. then would have been transformed into his "Castle Defiance" during those bleak days preceding imprisonment.64

The Bankruptcy.

I will lift up mine eyes unto the hills, from whence cometh my help. -Psalm 121.1

In June of 1797 Robert Morris "paid hire of horse & cart & men moving" He took occupancy of a dwelling owned by David Allison, location unknown. A journal entry on July 30th, 1797 refers to "sundry carpenters work done by said [Henry] Holdship to the house I now occupy which said Allison agreed to allow out of the rent of said House



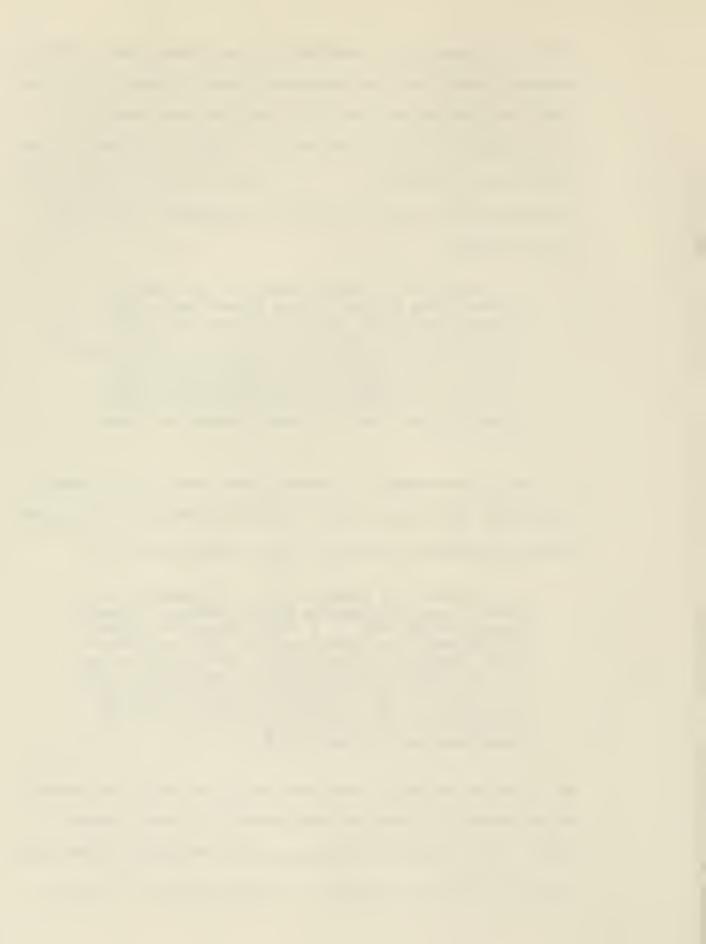
....*66 He apparently intended to stay there for a while; however, Morris had over-extended himself financially with land speculations and now his creditors were moving in. Morris sought refuge at the Hills, "bidding defiance to the sheriff and constable." In a letter from the Hills to his business partner John Nicholson on September 6th, 1797, Morris writes:

My Chestnut Street House & Lot, these grounds (the Hills) & some Ground Rents are advertised by Mr. Baker for Sale on the 15th inst. and what I am to do, I am at a Loss ... it is of little consequence whether I am taken or not, as yet I am furnished with victuals as formerly by Jenny & a black Cook who does not come into the House neither does any others except my own Family & such Persons as I send for 68

Morris attempted to obtain loans from old business associates, but to no avail, as illustrated by a letter to Nicholson written at the Hills on October 15th 1797:

I was this forenoon at the Butchers Arms where I met with Mess's Pratt, Ashley, Francis, Baker and (?) Fox ... I found these Gentlemen deliberating and observed that all their measures tended to guard against advance of Money and to keep the Commissioners, endorsers, Carroll and all at Bay, preferring to risque the Sacrifice of our property by means of forced sales to rescueing of it by an advance of the Sums necessary to save it.

Little did Morris realize that Pratt would be one of those purchasing some of that property at the "forced sales". The creditors and presumably the sheriff were also in pursuit of John Nicholson. Writing from the Hills on



December 21st, 1797, Morris tells Nicholson:

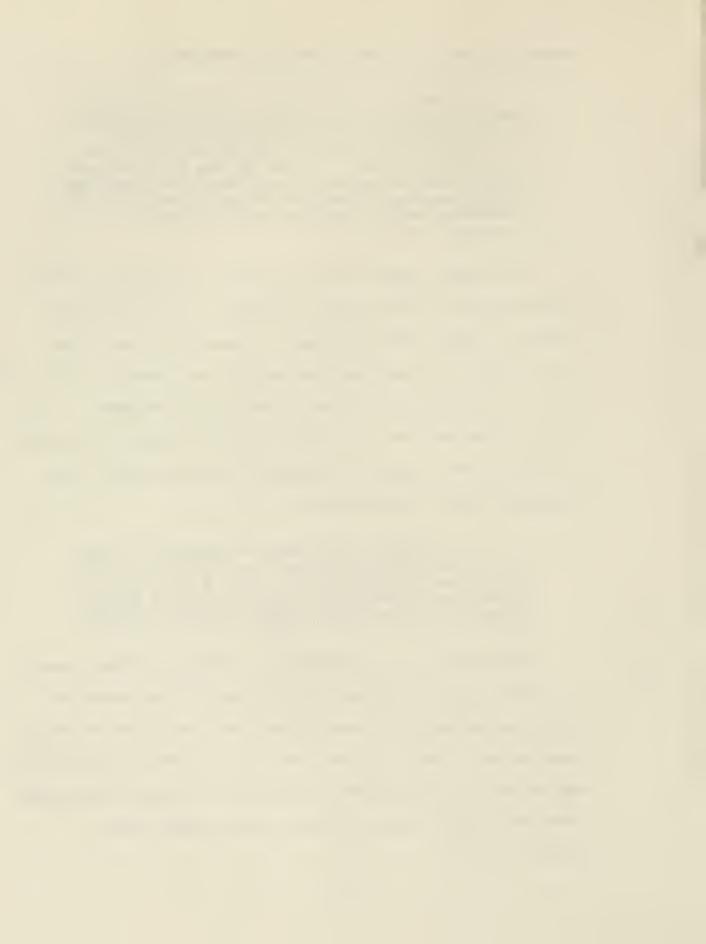
I wish you was here now I have a fine Fire, and the Night is so Cold that the Devil himself would not turn out to catch you going Home.

Good Heavens what Vultures men are in regard to each other, I never in the days of prosperity took advantage of any Mans distresses and I suppose what I now experience is to serve as a lesson whereby to see the folly of Humane & Generous Conduct. 70

One author summed up the situation of Morris's selfimposed exile, writing that, "Protected by his faithful
gardener, James, and his dogs, he remained at the Hills
until matters became hopeless and he gave himself up."71 "I
shall now prepare for Pruen Street" wrote Morris from
the Hills on February 5th, 1798. Two days later, still at
the Hills, Morris writes Nicholson revealing some of his
anxieties about the situation:

... is there any chance of saving my Furniture from the Sheriff & my Person from Jail or are those things Fixed? ... P.S. I have just received your letter of yesterday and its enclosures and I read Pruen Street in every line.

Robert Morris was committed to Debtor's Prison, where he would remain for three and 1/2 years. 73 He wrote to Nicholson on February 21st, 1798, from the prison on Prune (now Locust) Street, saying, "My Little Book of Suits is yet at the Hills as are a Number of Books and Papers which must come here when I have a place in which they can be placed "74



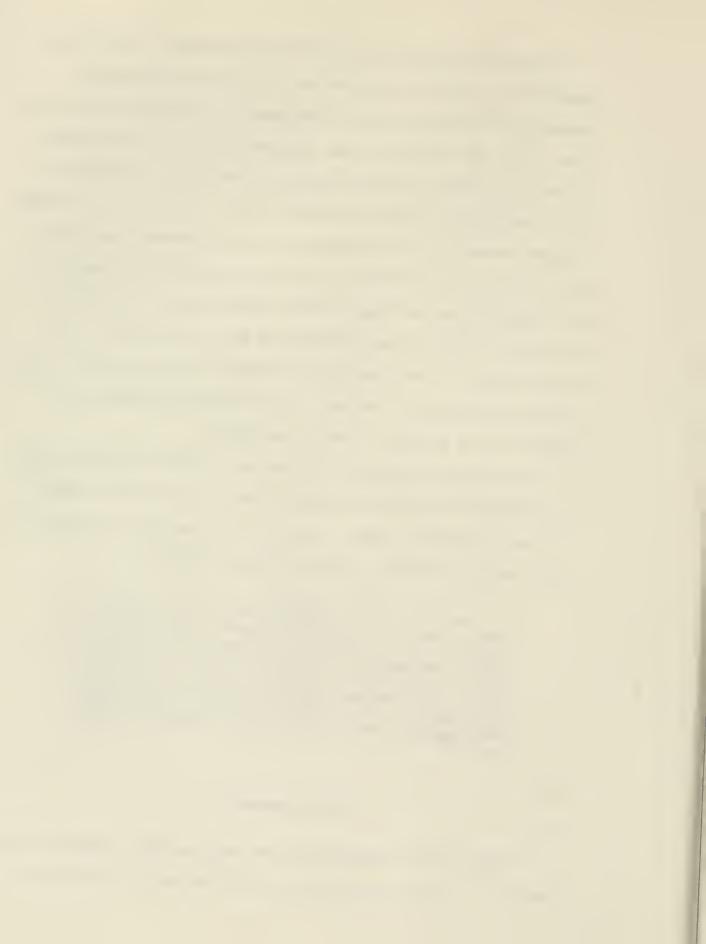
The Hills was sold at auction on March 15, 1799 [see Appendix D], "at the suit of the Pennsylvania Insurance Company," to whom he had mortgaged his property on October 13th, 1794, as stated on the mortgage document, discovered during this study, at the Historical Society of Pennsylvania. The site had been subdivided into lots, and two of them those containing the farmhouse and greenhouse complexes were bought by Henry Pratt. As if to officially complete the transaction, on August 25th, 1799, Morris recorded in his Ledger that he had received on May 9th \$750.00 from Henry Pratt for the greenhouse plants. At the time, this sum was quite a bit of money, indicating the high value placed on the plants in the greenhouse.

Morris was released from Debtor's Prison in 1801 after the passage of the United States Bankruptcy Act of 1800.⁷⁷ He died on May 8th, 1806. In his will, written a couple of years earlier, Morris states his case thusly:

Here I have to express my regret at having lost a very large fortune aquired by honest industry, which I had long hoped and expected to enjoy with my family during my long life, and then to distribute it among those of them that should outlive me. Fate has determined otherwise, and we must submit to the decree, which I have endeavored to do with patience and fortitude. 78

The Gardeners.

Robert Morris employed some very notable gardeners at The Hills. One of the most notable was David Landreth, a



native of Haggerston in Northumberland County, England, who is said to have emigrated to Canada in 1781.⁷⁹ He then came to Philadelphia in 1783, where three years later he started a nursery and seed business along with his brother Cuthbert.⁸⁰ The D. & C. Landreth Nursery would prove to be an outstanding establishment later, in the first half of the 19th century. In 1804 or 1805, David Landreth "obtained from the Lewis and Clark expedition seed of Osage Orange from which was grown a number of trees."⁸¹

David Landreth is first mentioned in the Morris ledgers studied in an entry on November 26th, 1791, and he appears to have been in the regular employ of Morris until March 19th, 1796. During this time there are numerous references to various items being delivered to D. Landreth; "Flower Potts", "Watering Potts", "2 Barrow", "Cedar Tubs for the Greenhouse", "iron bound Buckets", "4 large Elm Trees", "fruit Trees", and large quantities of "Dung" among them. 82 David Landreth seems to have been the head gardener, with references made to "sundry Labourers wages paid by him..." 83 A business appears to have been run out of The Hills, with David Landreth selling items at market. References cite him as owing "for amot. of sundries sold by him from my Garden and Greenhouse at the Hills" 84

Cuthbert Landreth, David's brother, is first mentioned as being paid by his brother on January 12th, 1793.85 He is not listed in the ledgers again until April 27th, 1796 when he begins to regularly appear on the payroll until November



25th, 1797. The next entry for Cuthbert Landreth is dated August 28th, 1798, after Robert Morris was imprisoned, and reads as follows: 86

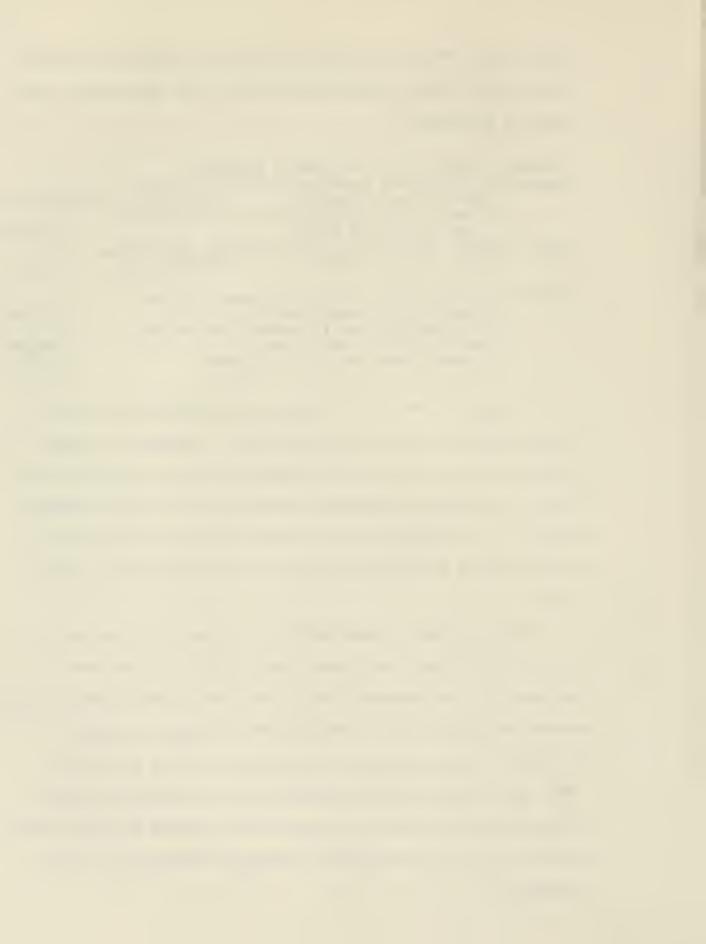
Cuthbert Landreth Dr. to Sundry Accounts Estate the Hills for Sundries sold by him from the Garden p. Accot. L93.15.2 1/2 is \$248.70 for Amot. of Sundries bot. by D. Landreth 139.85 from the Green House Robert Morris junr. for amot. Credited for balce. due at Morrisville 114.57 L42.19.3 1/2 Estate the Hills Dr. to Cuthbert Landreth for what he pd. Labourers &c. 652.25 for his wages from 19 march 1796 to 1st 204.45 March 1797 at L80 p ann. for Board Wages at \$2 1/2 p Week 125.--

It appears that both Landreth brothers were involved with properties other than the Hills; Cuthbert is often mentioned in connection with Robert Morris, Jr. at Morris-ville, and David is sometimes associated with the Delaware Works. They may each, at various times, have overseen all gardening at Robert Morris's Philadelphia area properties.

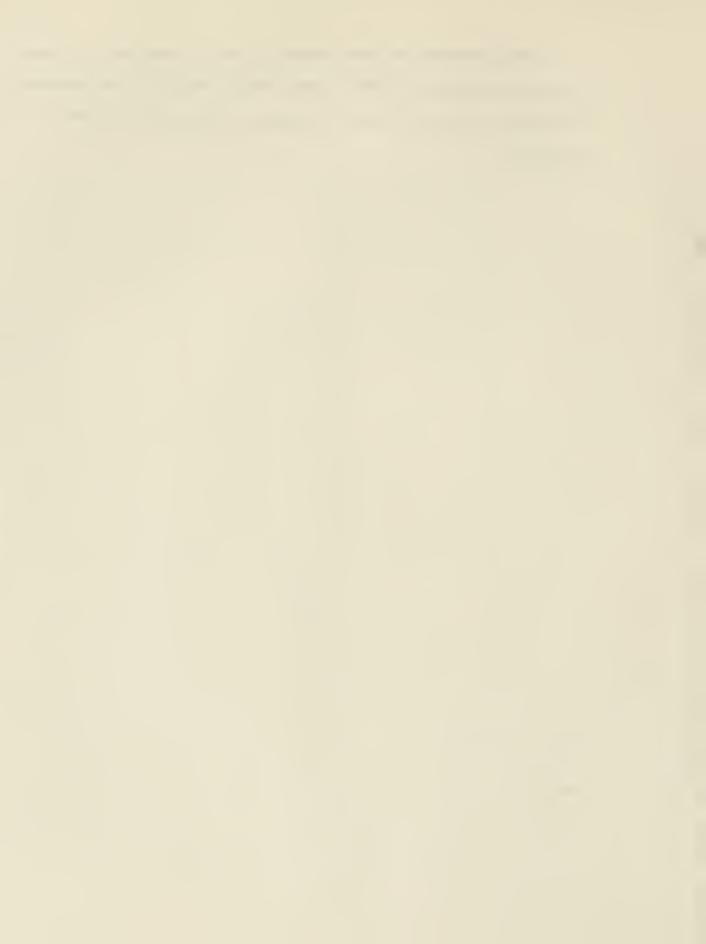
Other gardeners associated with the Hills include F.

Gottreu (July 30th to October 9th, 1797), William Read

(October 9th to November 25th, 1797) and James Donnelly, who worked from July 1797 to March 1799. Based on journal entries, it would appear that Gottreu, during his brief stay, was head gardener at The Hills, this position then being taken by Donnelly. Both men are listed as having sold plants out of the garden and "employed Labourers for the Garden." 88



The accounts of both Donnelly and C. Landreth continue into the spring of 1799, a year after Morris's imprisonment, and right up to the time of Pratt's acquisition of the property.



HENRY PRATT

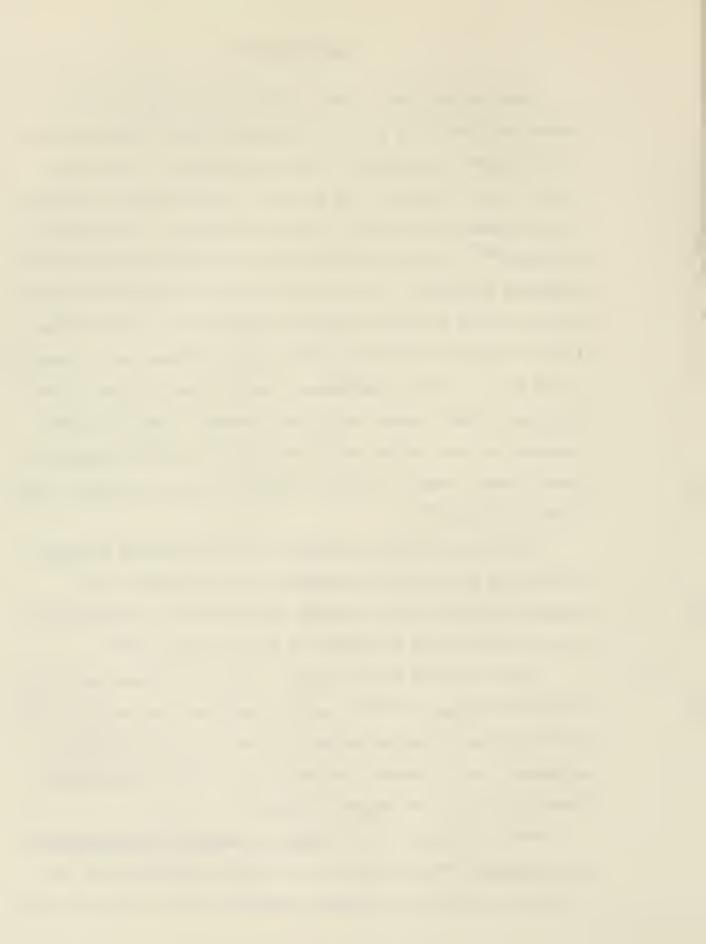
Born on May 14th, 1761, the son of Matthew Pratt, famous Philadelphia portrait painter, Henry Pratt would go on to become a prominent shipping merchant in the first years of the Republic. At an early age, Pratt was involved in the china and crockery trade, and later in the grocery business. Henry Pratt's insurance records located in the archives of CIGNA, formerly the Insurance Company of North America, were searched for the years 1792 to 1828. While these insurance records do not reveal information concerning Lemon Hill or the greenhouse, they do show us some of the cargoes he had insured with this company. These include tobacco, cotton, white and brown sugars, indigo, cornmeal, pork, hides, wheat, clothing, books and specie (money, specifically coin). 90

Pratt was an active member of Philadelphian society, reportedly serving as President of the Delaware Fire Company, member of the Chamber of Commerce, a Vestryman of Christ Church, and President of Select Council. 91

Pratt married three times; to Frances Moore in 1778, Elizabeth Dundas in 1785, and to Susannah Care in 1794. By his first two wives he fathered a total of ten children, although five of those, including all of the three named Henry, did not live beyond infancy. 92

Henry Simpson, in his <u>Lives of Eminent Philadelphians</u>

Now <u>Deceased</u> (Philadelphia, 1859, p.820) stated that "No calamity of trade or commerce unmanned him or threw him upon



a bed of nervous sickness. Writing in 1884, Scharf and Westcott describe Henry Pratt in the following manner:

Great perseverance and energy characterized his life, and marked him as a merchant of uncommon and unusual qualities... Mercantile pursuits were to him a passionate pleasure, and the adventures and speculations which follow unusually attractive. The unlimited credit and confidence which he enjoyed among merchants of the city enabled him to weather all panics and pressures in the money market, and to escape unhurt all the vicissitudes of his long business career.

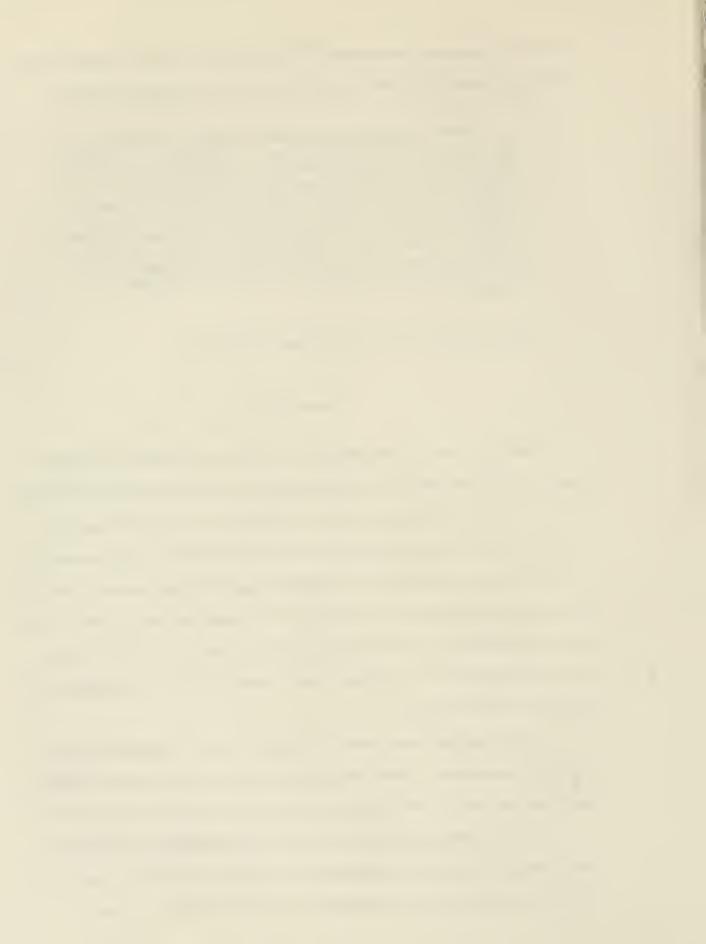
Henry Pratt died in February of 1838.

Lemon Hill.

Henry Pratt purchased a portion of The Hills at the Sheriff's sale held at the Merchants Coffee House on March 15th, 1799, For this portion containing 42 acres and 93 perches, Pratt paid the sum of \$14,654.22.95 This acreage is the site of Morris's farmhouse/garden/greenhouse complex. Pratt would make it into "one of the most elegant seats on this continent ... adorned with all that a refined taste could suggest or a liberal hand supply." He renamed the estate "Lemon Hill."

Pratt and Morris were presumably well aquainted prior to this purchase. They were both members of Christ Church and had actually had some business dealings in the past. 97

It has been suggested that "the purchase of the Hills was possibly nothing more than an investment." One relatively recent writer expressed the following opinion:

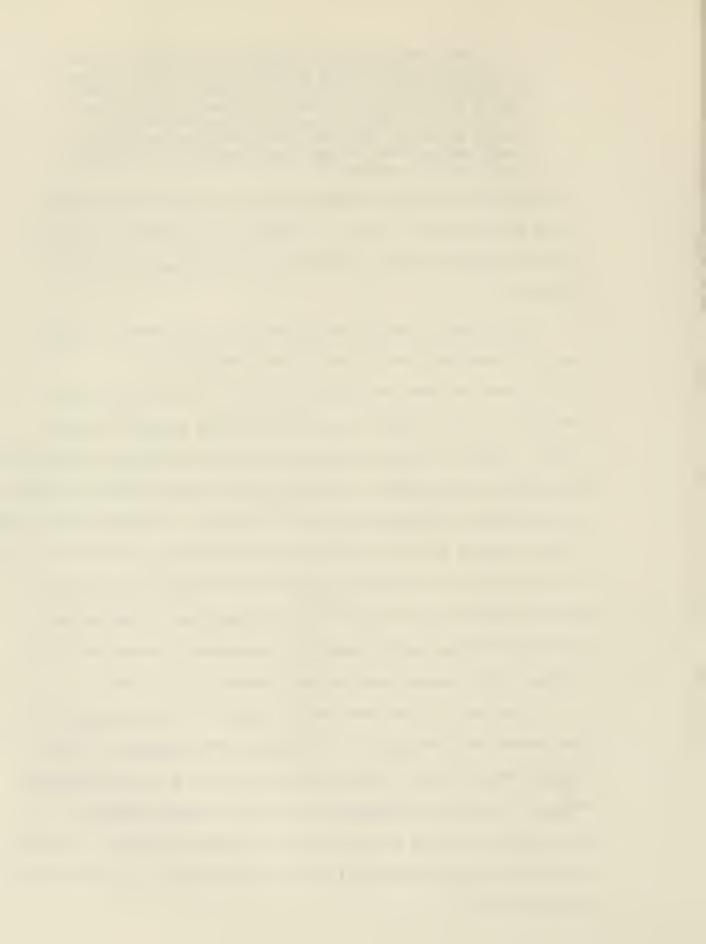


When Henry Pratt bought the estate ... one would have thought he purposed maintaining it as a summer retreat from the city where he already had a fine house on Fourth Street, but in the close to two score years of his ownership he never seems to have resided there but only to have maintained it and developed it as a horticultural show-place.

If this is so, then why did Henry Pratt build the present Lemon Hill mansion? Also, if this was strictly an investment, 37 years seems to be quite a long time to tie up capital.

One piece of possible supportive evidence as to the date of construction of the house consists of a tin rain-water conductor head found in the attic of the mansion in 1962, which has the date 1800 worked into the front. There are other examples of this practice, which had precedent in England, the detail being added when a building had reached a completed form. However, it would seem that this evidence alone is rather circumstantial; there is no guarantee that simply because it was found in this attic that it was originally installed on this structure. This object could have been left there by a subsequent tenant who collected tin or architectural artifacts or the like.

Even so, we can confidently date the construction of the Lemon Hill mansion to 1799-1800. The record of the United States Direct Tax of 1798 contains a section headed "Taken Since the Assessment" in which is described as belonging to Pratt a two story stone dwelling house, 54 feet by 36 feet, with piazza 14 by 35, with a total evaluation of \$10,000.00.101



The Grounds.

We are fortunate that, while there are no known drawings or plans of the grounds themselves during Henry Pratt's time, we do possess a number of detailed descriptions of the property. The Duke of Saxe-Weimar, who visited in 1825, gives the following account of Lemon Hill, with an unexpected twist:

It is situated upon a rocky peninsula, formed by the Schuylkill, immediately above the Waterworks. The soil consists mostly of quartz and clay. The owner seldom comes there, and this is easy to be perceived, for instead of handsome grass-plots you see potatoes and turnips planted in the garden. The trees, however, are very handsome, mostly chestnut, and some hickory. I also observed particularly two large and strong tulip trees; the circumference of one was fifteen feet. In the hothouses was a fine collection of exotic plants; some of the order Euphorbia from South America; also a few palm trees. The gardener, an Englishman by birth, seemed to be well acquainted with his plants. Through a hydraulic machine the water is brought up from the river into several basins, and thence forced into the hothouses. There was also in the garden a mineral spring of a ferruginous quality. 102

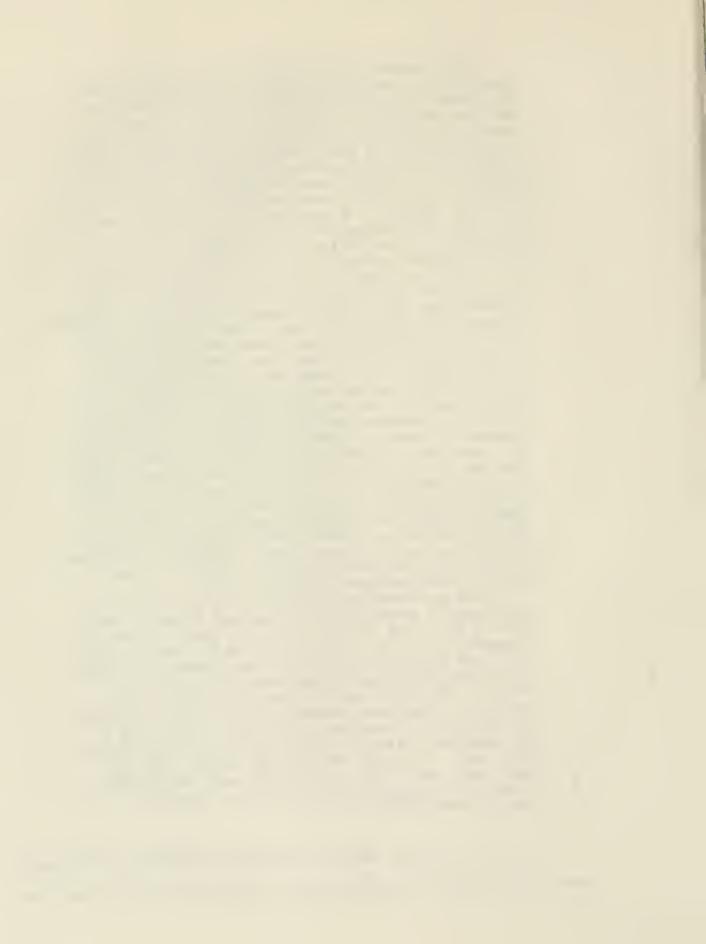
The eyewitnesses tend to emphasize different aspects of the grounds, whether they are a subject of particular interest or merely what was seen. The Duke noticed the potatoes and turnips, but seemed particularly interested in the trees that were on the property and in the greenhouse. The next writer, Benjamin Covington Wailes of Natchez, seemed taken by the water features and structures in the garden, as well as a few of the outstanding plants. His account while on a tour of the area in 1829 is as follows:



The scenery arrond the water works, & especially from the Basins, is extremely fine. You have in view the greater part of the City, the two Schuylkill bridges, a large extent of beautiful Country beyond the Schuylkill spotted with buildings & embelished with gardens, pleasure gronds & spotted over with beautiful evergreens. ... But the most enchanting prospect is towards the grand pleasure grove & green house of a Mr. Prat[t], a gentleman of fortune, and to this we next proceeded by a circutous rout, passing in view of the fish ponds, bowers, rustic retreats, summer houses, fountains, grotto, &c., &c. The grotto is dug in a bank [and] is of circular form, the side built up of rock and arched over head, and a number of Shells. A dog of natural size carved out of marble sits just within the entrance, the guardian of the place. A narrow aperture lined with a hedge of arbor vitae leads to it. Next is a round fish pond with a small fountain playing in the pond. An Oval & several oblong fish ponds of larger size follow, & between the two last is an artificial cascade. Several summer houses in rustic style are made by nailing bark on the outside & thaching the roof. There is also a rustic seat built in the branches of a tree, & to which a flight of steps ascend [a tree-house!]. In one of the summer houses is a Spring with seats arrond it. The houses are all embelished with marble busts of Venus, Apollo, Diana and a Bacanti. One sits on an Island on the fish pond. All the ponds filled with handsome coloured fish.

The grounds are planted with a variety of shrubbery & evergreens of various kinds of the pine & fir, and the hot house is said to be the largest in the US. It is filled to overflowing with the choicest Exotics: the Chaddock Orange of different kinds & the Lemon loaded with fruit. There are two coffee trees with their berries. Some few shrubs were in flower & others seeded, & I was politely furnished with a few seed of 2 varieties of flowers (Myrtle & an accacia). In front of the hot house, one at each end, is a Lion of marble, well executed, & a dog in front On the roof is a range of marble busts. 103

The fact that Mr. Wailes visited on December 29th could have influenced his observations. He would have noticed the



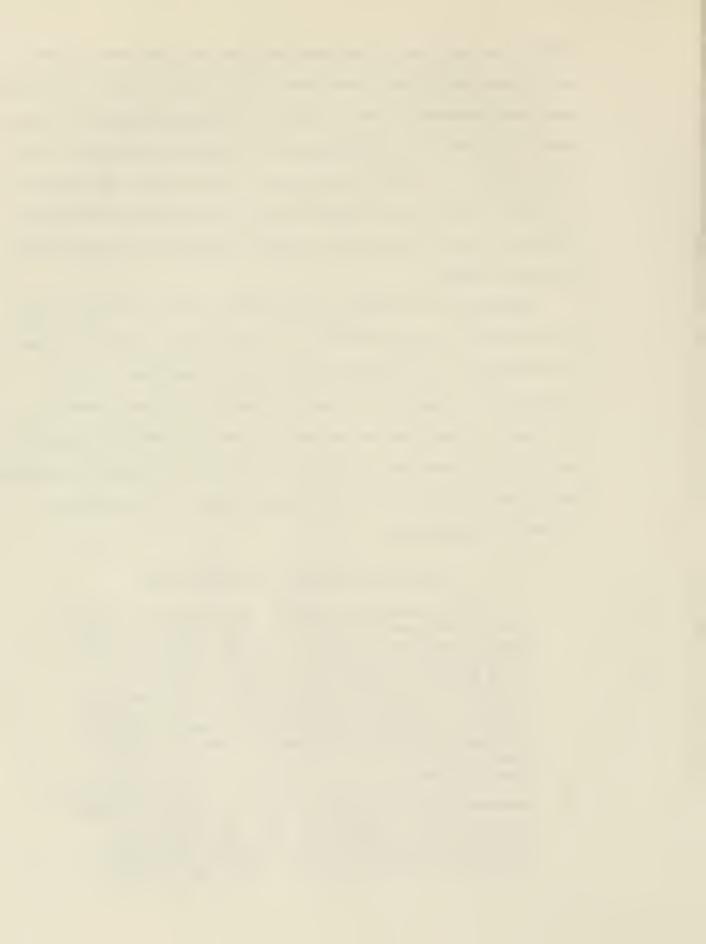
evergreens and the structures because the deciduous trees and shrubs would have been bare, and flowers would obviously have been missing. How impressive the greenhouse must have been, with those mentioned exotic tropical plants and flowering shrubs. It must have been a mild winter, as one gets the idea from the description that the fountains were operating and the fishponds with their "handsome coloured fish" were not frozen.

There is yet another description of the grounds, this from a visit in July of 1830. In that year, the Pennsylvania Horticultural Society appointed a committee to visit gardens and nurseries in the Philadelphia area. Because this was a committee of the Horticultural Society, they were naturally interested primarily in the plant material, as the following report, illustrating the garden in its summer splendor, indicates:

LEMON HILL, ESTATE OF HENRY PRATT

This beautiful garden, so creditable to the owner, and even to the city of Philadelphia, is kept in perfect order at a great expense. Few strangers omit paying it a visit, a gratification which is afforded to them in the most liberal manner by the proprietor. Nor can any person of taste contemplate the various charms of this highly improved spot, without being in rapture with the loveliness of nature- everywhere around him, so chastely adorned by the hand of man.

Undoubtedly this is the best kept garden in Pennsylvania, and when associated with the green and hot house department, may be pronounced unrivalled in the Union. The gravel walks, espaliers, plants, shrubs, mounds, and grass plats, are dressed periodically and minutely.



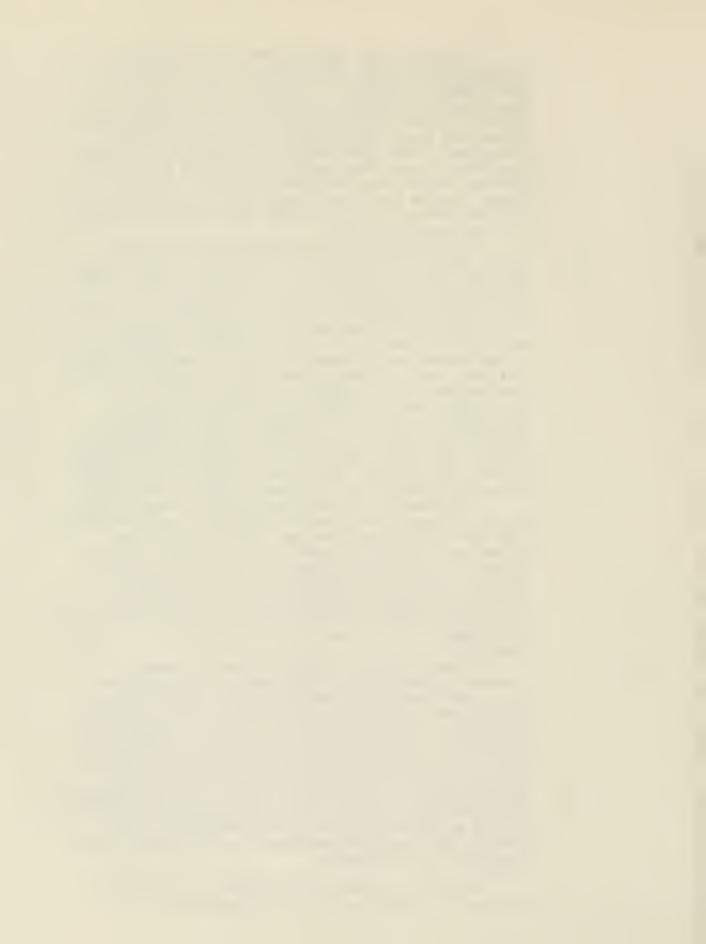
... Along the walks, the flower borders are interspersed with Thunbergias, Eccremocarpus, Chelonias, Mimosas, &c. The Laurustinus, sweet Bay, English Laurel, Rosemary, Chinese privet, Myrtle, Tree Sage and South Sea Tea, stand among them, and bear the winter with a little straw covering. Even the Verbena triphylla, or Aloysia Citriodora, has survived through our cold season in Mr. Pratt's city garden; seven of these plants are evergreens, and if they become inured to our climate, they will add greatly to our ornamental shrubs.

The treasures contained in the hot and green houses are numerous. Besides a very fine collection of Orange, Lemon, Lime, Citron, Shaddock, Bergamot, Pomgranate and Fig trees in excellent condition and full of fruit, we notice with admiration the many thousand of exotics to which Mr. Pratt is annually adding. The most conspicuous among these, are the tea tree; the coffee tree - loaded with fruit; the sugar cane; the pepper tree; Banana, Plantain, Guva, Cherimona, Ficus, Mango, the Cacti in great splendour, some 14 feet high, and a gigantic Euphorbia Trigonia - 19 years old, and 13 feet high. The green Houses are 220 feet long by 16 broad; exhibiting the finest range of glass for the preservation of plants, on this continent.

Colonel Perkins, near Boston, has, it is true, a grapery and peach Espalier, protected by 330 feet of glass, yet as there are neither flues nor foreign plants in them, they cannot properly be called green houses, whereas Mr. Pratt's are furnished with the rarest productions of every clime, so that the committee places the conservatory of Lemon Hill at the very head of all similar establishments in this country.

There are some pretty bowers, summer houses, grottos and fish ponds in this garden - the latter well stored with gold and silver fish. The mansion house is capacious and modern, and the prospects, on all sides, extremely beautiful. In landscape gardening, water and wood are indispensable for picturesque effect; and here they are found distributed in just proportions with hill and lawn and buildings of architectural beauty, the whole scene is cheerfully animated by the brisk commerce of the river, and constant movement in the busy neighbourhood of Fairmount.

An engine for raising water to the plant houses, is sometimes put in operation. Mr.



Pratt placed it here at a cost of three thousand dollars. The vegetable garden is well kept and is of suitable size. For many years the chief gardener was assisted by eleven or twelve labourers, he now employs only six; probably owing to the finished condition to which the proprietor has brought his grounds. The whole plot may contain about 20 acres; Mr. Pratt has owned it 30 years or more. The superintendent aided by the liberal spirit of that gentleman, conducts his business with skill and neatness, and may challenge any garden for minute excellence or general effect.

The committee report is significant to this study in a number of ways. It has given the dimensions of the greenhouse, "220 feet long by 16 broad," which is probably the structure at its largest. This report also illustrates the fact that Pratt had ample opportunity to collect exotic plant materials from around the world due to his shipping business. The description given above is indeed an invaluable resource when researching and discussing the plants located inside the greenhouse and outside in the garden. Indeed, many of these specimens are among those listed in a catalogue of the green and hot house plants sold at auction at Lemon Hill in June of 1838 [see Appendix E], five months after Pratt's death, but two years after he had sold the property.

This catalogue of June 1838 indicates that, in addition to a vast array of different exotics, the greenhouse held huge collections of roses, carnations, geraniums, camellias, and citrus (lemon, orange and lime of sundry varieties), as well as large quantities of aloes, myrtles, primroses, cactus and hydrangeas, and a number of coffee trees. 105



One other reference to the grounds of Lemon Hill at the time of Pratt's ownership goes beyond a physical description of the property, crediting Pratt's endeavors with having a positive effect on the populace of Philadelphia. This passage is from none other than Alexander Jackson Downing himself, in his Treatise on the Theory and Practice of Landscape Gardening, the first American treatise on landscape gardening. Writing in 1841, Downing states the following:

Lemon Hill, half a mile above the Fairmount water-works of Philadelphia, was, 20 years ago, the most perfect specimen of the geometric mode in America, and since its destruction by the extension of the city, a few years since, there is nothing comparable with it, in that style, among us. All the symmetry, uniformity, and high art of the old school, were displayed here in artificial plantations, formal gardens with trellises, grottoes, spring-houses, temples, statues, and vases, with numerous ponds of water, jets-d'eau, and other water-works, parterres and an extensive range of hothouses. The effect of this garden was brilliant and striking; its position, on the lovely banks of the Schuylkill, admirable; and its liberal proprietor, Mr. Pratt, by opening it freely to the public, greatly increased the popular taste in the neighborhood of that city. 106

Considered to be the "father of American landscape design," Downing had written and contrasted the past and present of garden design, and had at his command a wealth of examples to utilize. As an outstanding example of the older, geometric mode, he chose Lemon Hill. That Downing would be impressed enough with the facilities at Lemon Hill, although of the "old" style, to include a description in his Treatise is significant. Downing's praise of Mr. Pratt for opening his grounds to the public foreshadows the rise of

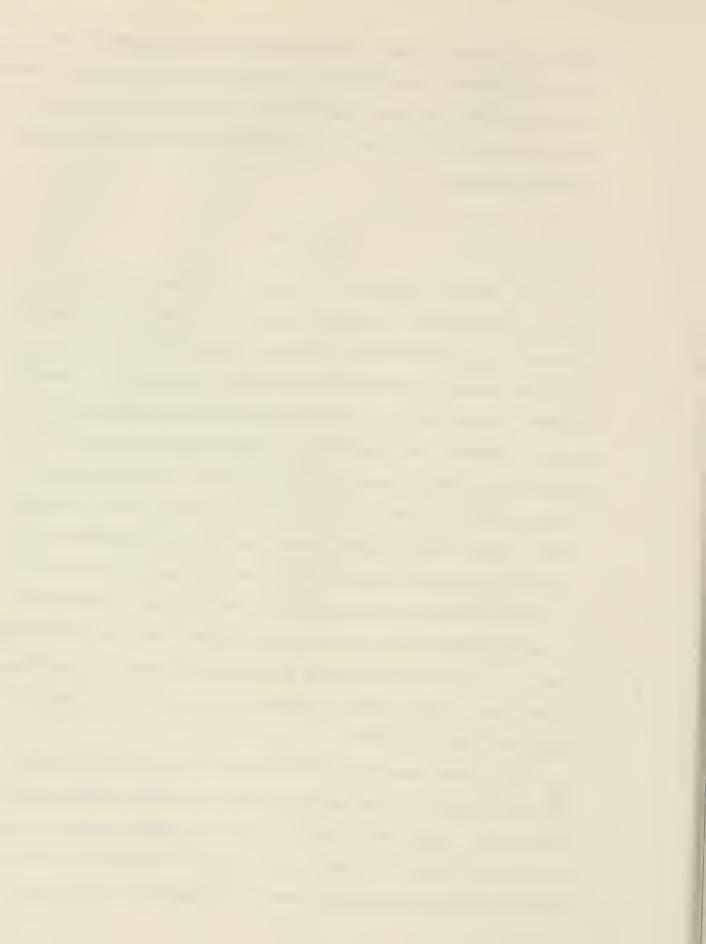


public pleasure grounds. Both Downing and the Committee from the Horticultural Society, ten years earlier, gave credit to Pratt's horticultural achievement, and to his generosity in allowing visitors, for elevating and inspiring the public of Philadelphia.

Nurseries.

If "Pratt's Gardens," as Lemon Hill was called, influenced the public toward horticultural endeavors, as Mr. Downing stated, then this influence also affected the nursery businesses that flourished during this period. People needed a source of the plant materials and gardening supplies necessary to create their own inspired garden. New species were being introduced at an ever increasing rate, and the public turned to the local nurseries for enlightenment. Among these establishments were the prominent horticultural gardens of Landreth, Buist, McArran and others. 107 In order to meet this growing interest in plants of tropic or semi-tropic origin, these growers made many introductions into the local market; among them daturas, acacias, correas, erythrinas, hoyas, cacti, crassula, ficus, eutaxia, ardisias, and ruellias. 108

The three nurseries cited above are particularly notable as each of the owners had worked at some time at Lemon Hill. Thus, Lemon Hill had far-reaching importance for horticulture in the city and in the region. Cuthbert and David Landreth have already been noted in connection with Robert



Morris at the Hills. John McArran is credited with the design of the grounds of Henry Pratt's estate. According to the aforementioned committee of the Pennsylvania Horticultural Society, "To Mr. M'Arran's science and taste as a landscape gardener, Mr. Pratt is mainly indebted for the decorations of Lemon-Hill." McArran had allegedly been gardener for William Hamilton at the Woodlands for seven years, 110 and opened his Botanic Garden and Nursery around 1820 or 1821. Located on the south side of Arch Street between 17th and 18th Streets, this business is said to have covered 4 acres and contained gravelled walks, a large selection of plants, and a greenhouse of 102 feet in length. 111 It is reported that "evening entertainments were offered in his long and spacious hot-houses." 112

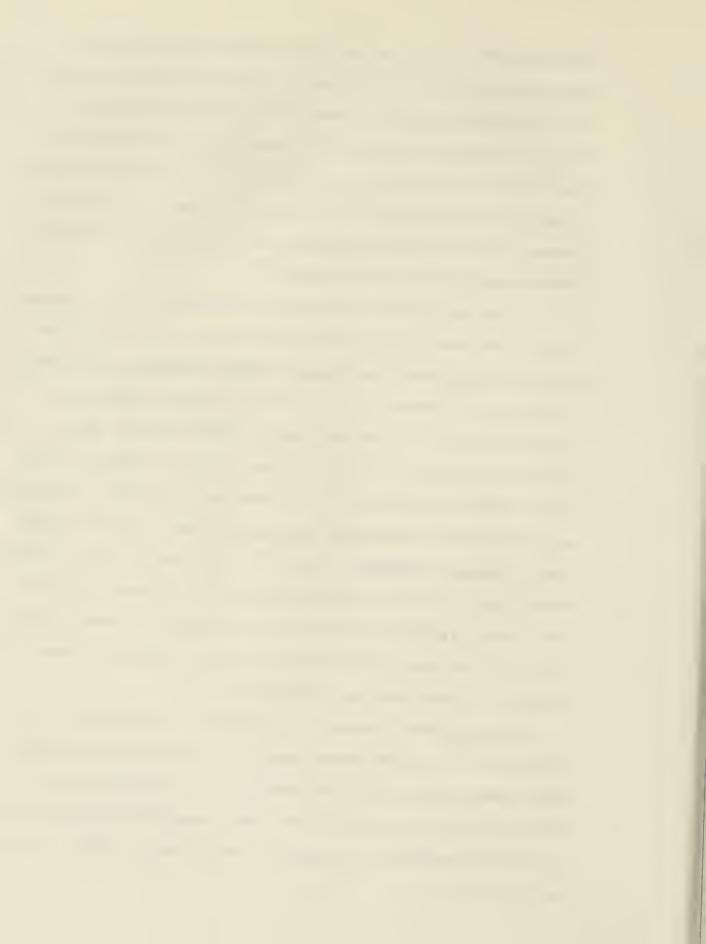
Perhaps the most renowned of Pratt's gardeners was Robert Buist, born near Edinburgh, Scotland, in 1805, and trained at the Edinburgh Botanic Gardens and at "one of the most famous gardening establishments in England," Elvaston Castle. Buist came to America in 1828 at the age of 23, whereupon he began to work at the nursery of David Landreth. For what must have been a short period of time Buist was employed by Henry Pratt at Lemon Hill, being present at the time of the visit by the Committee of the Pennsylvania Horticultural Society, which commented in their report,"... we are greatly indebted to an able gardiner, Mr. Buist, for his industry, constant attendance, and intelligence, in noting on the spot, whatever seemed worthy of the Society's



attention."114 In this same year (1830), Buist formed a partnership with a local florist, Thomas Hibbert. Together they purchased M'Mahons nursery 115 and began what would become an immense nursery and greenhouse business at 140 South Twelfth Street in Philadelphia. 116 An 1846 lithograph by Alfred Hoffy (fig. 6), in the collection of the Library Company of Philadelphia, "shows the long ranges of Buist's greenhouses and hot bed frames."117

To better educate the public in horticultural matters, Hibbert and Buist authored several books on horticulture, among them The American Flower Garden Directory (1832), which includes full lists of the flowers in fashion and under cultivation at the time of Pratt's achievements; thus Buist's work would be of more than cursory interest in the study of the identity of plants used at Lemon Hill. Hibbert and Buist also co-authored The Rose Manual (1844) and The Family Kitchen Gardener (1847). 118 In a publication of the Pennsylvania Horticultural Society, the writings of Buist and Hibbert are credited with having "filled a need in the developing of American horticulture as evidenced by the number of times they were reprinted." 119

The last head gardener at Lemon Hill was Peter Mackenzie, "an acknowledged master, winning for Mr. Pratt, among many other awards, prizes from the Pennsylvania Horticultural Society for the first mango exhibited and for a splendid specimen of poinsettia with bracts twenty inches across." 120



Henry Pratt, Robert Buist and John McArran were frequent contributors to the exhibitions of the Horticultural Society which began those annual events in 1829. Reports on those exhibitions were studied, revealing numerous references to the plant contributions of these men and to prizes often awarded for outstanding horticultural achievements. In other words, there is no doubt that the horticultural activities at Lemon Hill went beyond the private sphere and were an influence also on the public level.

Public Access.

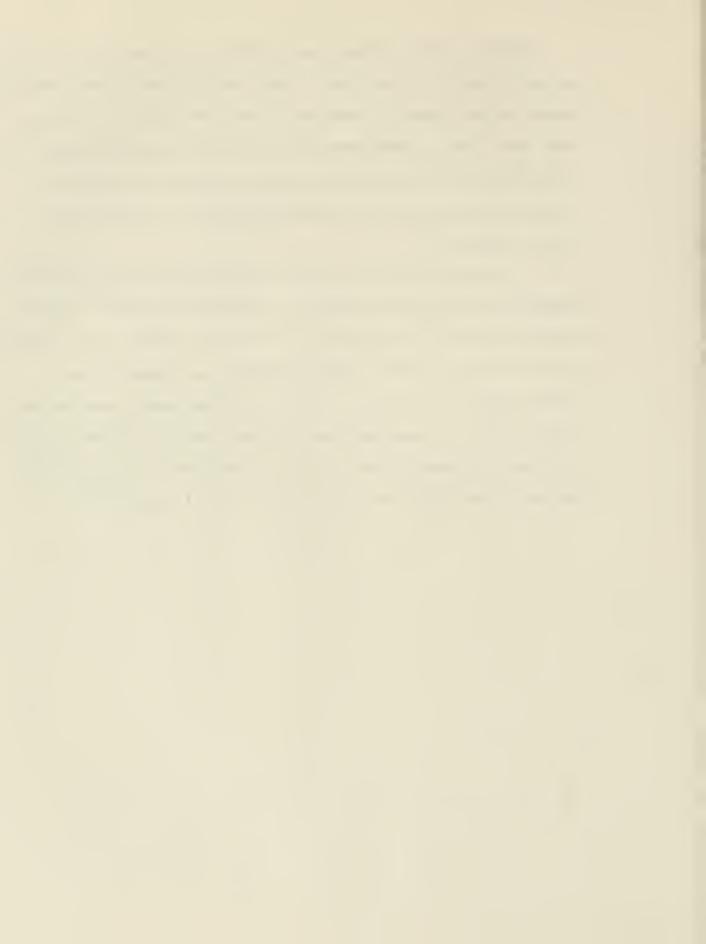
In addition to the specialized horticultural activities having an impact upon Philadelphia horticulture, the public at large was definitely influenced as well by the site of Lemon Hill itself. Henry Pratt was known to allow the public to have access to his beautiful pleasure grounds, admission granted by ticket. The local populace, as well as foreign guests and out-of-town visitors, apparently went out of their way to catch a glimpse of "the most elaborate and beautiful complex of gardens and grottos in Pennsylvania." An English traveller wrote the following diary entry on June 29th, 1819:

Visited Lemon Hill, the seat of J. Pratt, Esq. The gardens of this gentleman are finely situated, and laid out with superior taste - a little paradise. It is one of the grand resorts of fashionable company in summer. These obtain admission by a ticket from the proprietor or his select friends - none without - and yet they are most crowded in fine weather. 123



Whether these tickets were difficult to obtain is not actually known at this time. Most reports state the liberal nature of Mr. Pratt's indulgence, and yet there is one who said that "the grounds were kept strictly secluded except to the favored few who received the privilege of visiting it, and although it was a place much talked of, it was very little known." 124

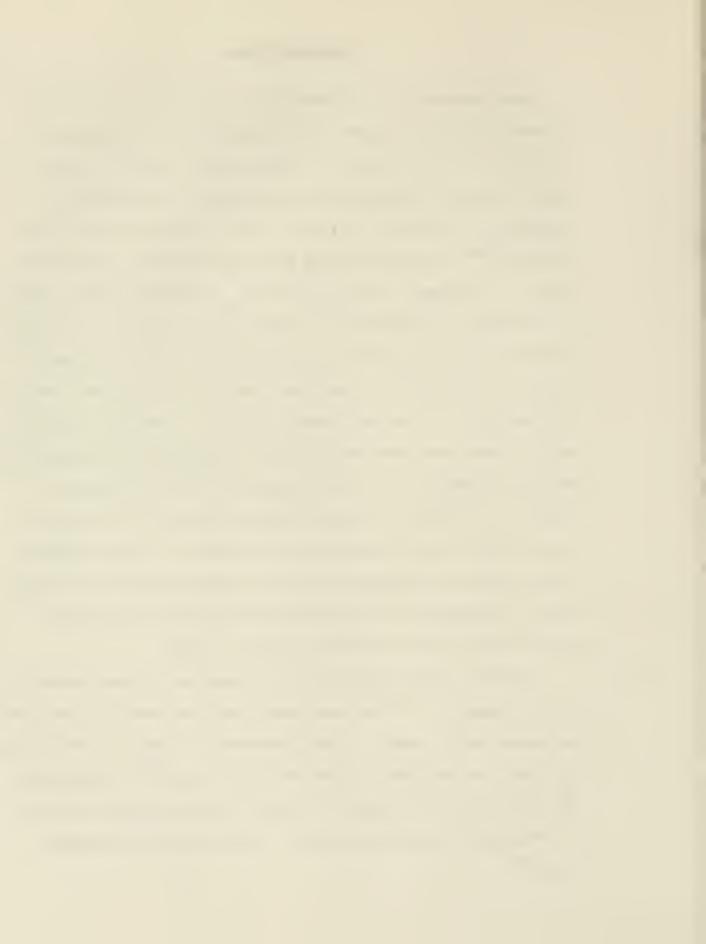
In any case, by allowing admission to the grounds of Lemon-Hill, Henry Pratt began a tradition of public access which continues, in the form of Fairmount Park, to this very day. Writing in 1856, Charles Keyser was aware of the significance of this site when he stated that "...under Mr. Pratt's care it retained that elegance and luxury which, up to a period comparatively recent, rendered it, as 'Pratt's Garden', the pride and pleasure of our citizens." 125



FAIRMOUNT PARK

The accounts of the Lemon Hill estate after the death of Henry Pratt are rather sketchy and full of misinformation. Most reports state that Henry Pratt sold the estate to Isaac S. Lloyd, a speculating developer, who reportedly proceeded to demolish "all that half a century of care had created."126 In reality, The property was sold to Knowles Taylor, a merchant of New York City, on February 29th, 1836, for the sum of \$225,000. 127 A map in the possession of the Fairmount Park Commission titled "Plan of Fairmount Docks" shows this and surrounding land laid out with streets and a grid pattern of lots and canals (fig. 7). The area immediately around the mansion house and greenhouse, both shown on the plan, makes up a lot as large as six of the typical lots, and contains the name of Knowles Taylor. As one of the lot lines runs through the greenhouse, it would appear that Mr. Taylor was party to the proposed dissection of the estate. Thankfully this plan was never put into effect, possibly due to the financial panic in 1837.

Because of the failure of Mr. Knowles to make payments on the property, it was once again sold at sheriff's sale on September 12th, 1840. It was purchased by Henry J. Williams in trust for the Bank of the United States. A few years later this bank was heavily in debt, and Lemon Hill estate was "exposed at peremptory sale" on the 21st of November, 1843.



At about this same time, concerns were being voiced on the maintainance of the purity of the city's water supply, which was obtained from the Schuylkill River downstream from Lemon Hill at the Water Works. The prospect of the land being subdivided and covered with factories caused understandable concern among some farsighted individuals in Philadelphia. It was argued in 1843 that the possession of Lemon Hill by the City "may prove the means of more effectually protecting the basin at Fairmount from the introduction of substances more or less prejudicial to our community."130 Finally, after receiving numerous petitions and upon the recommendation of the College of Physicians, the estate was purchased for the sum of \$75,000, the final exchange occuring on July 24th, 1844. In 1855 one writer looking back at this monumental decision, gives it the following significance:

The City Councils of 1843 have laid us under many obligations. With a just appreciation of the wants of this large city they secured for us, and those who are to come after us, that beautiful piece of land known as Lemon Hill. No act of city legislation, from the time of Penn till this day, will afford more heartfelt pleasure to those who are to follow us, than this purchase of Lemon Hill for the public use. 132

As this was occurring, others were seeing a greater value associated with this property than merely protecting the water supply. The Pennsylvania Horticultural Society presented to Councils a communication suggesting the establishment of a garden at Lemon Hill. It was referred to a

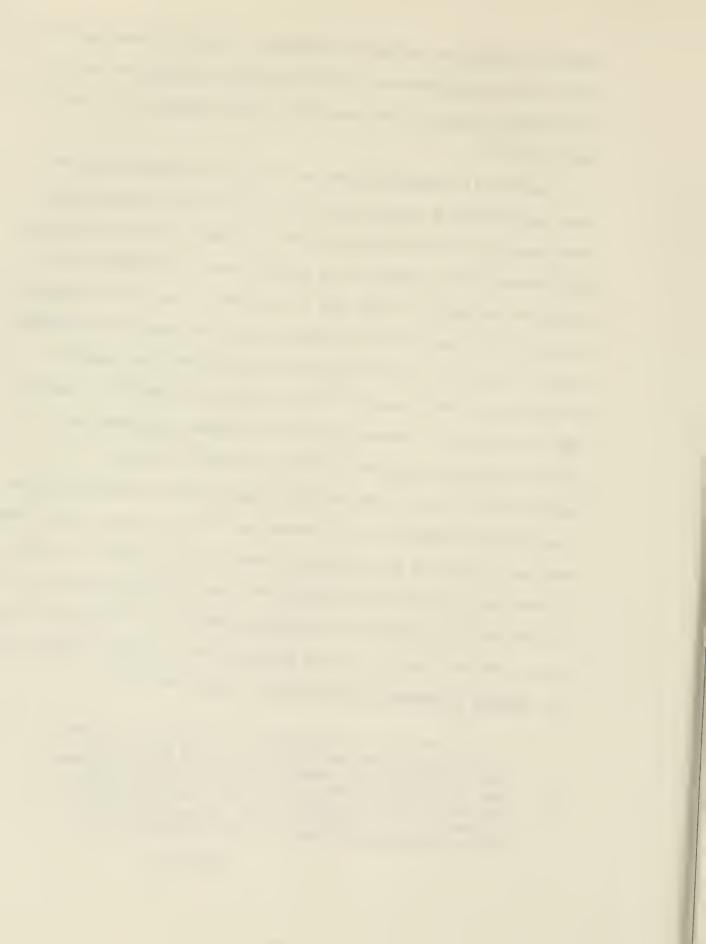


special committee and never acted on. "By this neglect the city lost the opportunity of preserving the spot in much of the beauty which it had attained in the hands of its early owners." 133

And so it happened that the idea of creating a garden spot where such a magnificent horticultural endeavor had once stood, was shelved for over a decade. In the meantime, the grounds were leased at a yearly rent of \$600.00; said lease being made in 1847 for a period of ten years, subject to the provision that the lessee would "surrender possession of the premises if the City should dedicate the same to public use, upon receipt of six months' notice." 134 During the time of this lease, the estate became something of a public resort, being called by the name "Pratt's Gardens."135 From 1847 to 1854 "huge stone icehouses" were reportedly operated on the property. 136 For many years, the mansion house and surrounding grounds were leased as a beer garden, which is said to have been a very popular spot with the German population of Philadelphia. 137 At the end of his lease, under-tenant P. Zaiss placed the following notice in the <u>Sunday Dispatch</u> on September 16th, 1855: 138

Lemon Hill, Lemon Hill. - Farewell. - The Public House on Lemon Hill, with a great Sour Krout Lunch, will take place on Monday, September 17, 1855, on account of establishing new business. The lunch will be served up from 1 o'clock till 3 o'clock, P.M. Lager Beer and other refreshments are all of the best kind.

P.Zaiss



By the time the tenants were given notice in 1855, a great deal of destruction had apparently taken place on this once beautiful spot. Charles S. Keyser, writing in 1856, gives the following account:

... at the end of this time [the tenant's tenure], by neglect, by fire and by wanton destruction, this place, the abode of a once princely luxury, had fallen into ruin; where beautiful hothouses filled with rare exotics overlooked the river, only falling walls blackened by fire remained; the shrubbery had been destroyed, the little bark grotto over the spring had decayed; and the ponds once filled with the gold fish had become loathsome with slime; only the grand old tulip trees remained, and the pines which stood as they still stand today, silent sentinels around the deserted mansion

When their "great icehouses of stone" had fallen into ruin, it is reported that they simply built new ones in other places, "thus they added cumbrous buildings to ruins." 140

During this period of leasing by the city, there were some attempts to inspire enthusiasm for the idea of establishing a public park. While the city was debating whether to subdivide the property or fashion it into a cemetery, 141 a resolution was offered by Mr. Job R. Tyson in 1849 "for the appointment of a Joint Special Committee of three members each Council, to consider the expediency of appropriating the grounds of the Lemon Hill property to a company of gentlemen for enclosure and improvement as a Public Promenade." 142 This consideration was postponed.

Again, in 1851, the subject was brought up, and Frederick Graff, Superintendent of the Fairmount Water

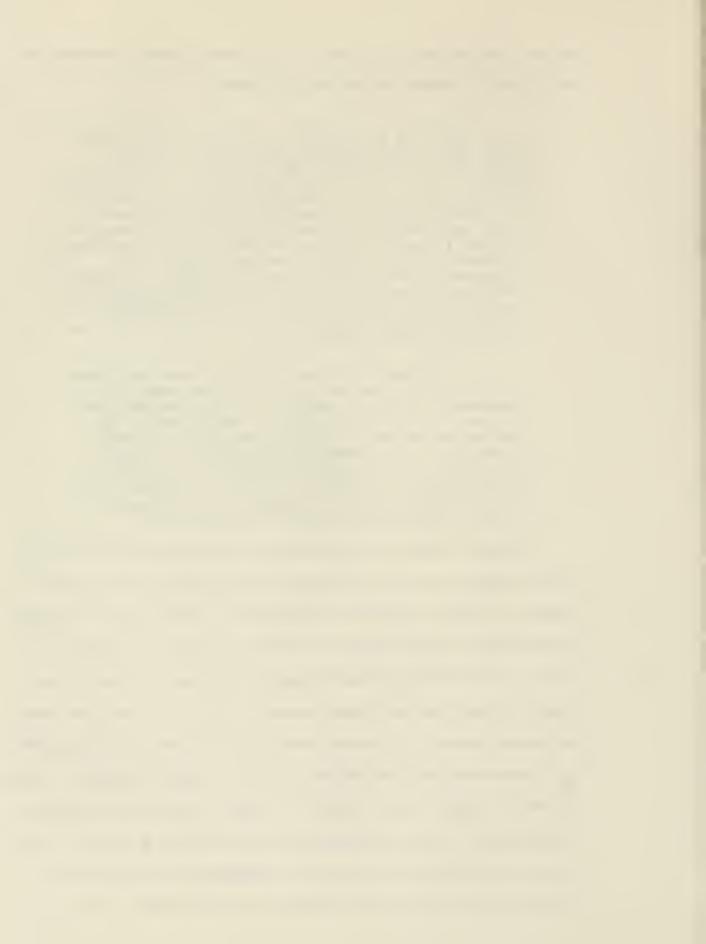


Works, came up with a plan. In a letter which accompanied the plan Mr. Graff wrote the following:

Herewith please find a sketch of the Lemon Hill Estate and part of Fairmount, laid down with the object of making it available as a Public Park ... The plan proposed, is to lay out the large lot of ground upon the north side of the reservoirs at Fairmount (now unimproved) with roadways forty feet wide, with the view of making it serve as an entrance to the grand park at Lemon Hill. On this latter place it is proposed to construct roads forty feet in width, winding around the elevations of the ground, and the building upon the place, by which means a drive of three or four miles in length could be obtained on Lemon Hill alone.

... [This plan] would bring into use property which is now going to ruin for want of a purpose to which to apply it. The estate cannot be shut in by buildings, and there can be no desire or necessity to run the public streets through it, as undoubtedly would be the case with some of the other properties which have been proposed for parks; it has the benefit of water scenery, and for beauty of situation and natural advantages cannot be excelled. 143

Indeed, Graff's plan does show a massive quantity of roads winding over the property, reminiscent of a pit of snakes. It was, however, a beginning. There was a growing appreciation of the need for public pleasure grounds, not merely for the beauty and pleasure they could afford, but primarily for the healthful aspects of a visit to the country where the air is unspoiled and exercise is to be gained by traversing the undulating ground. Charles Keyser, trying to muster support for a park in 1856, quotes Lord Chatham, saying, "parks are the lungs of cities." "In a liberal way," Keyser continues, "also our great founder justified the thought, providing in the forest, for his infant city, our



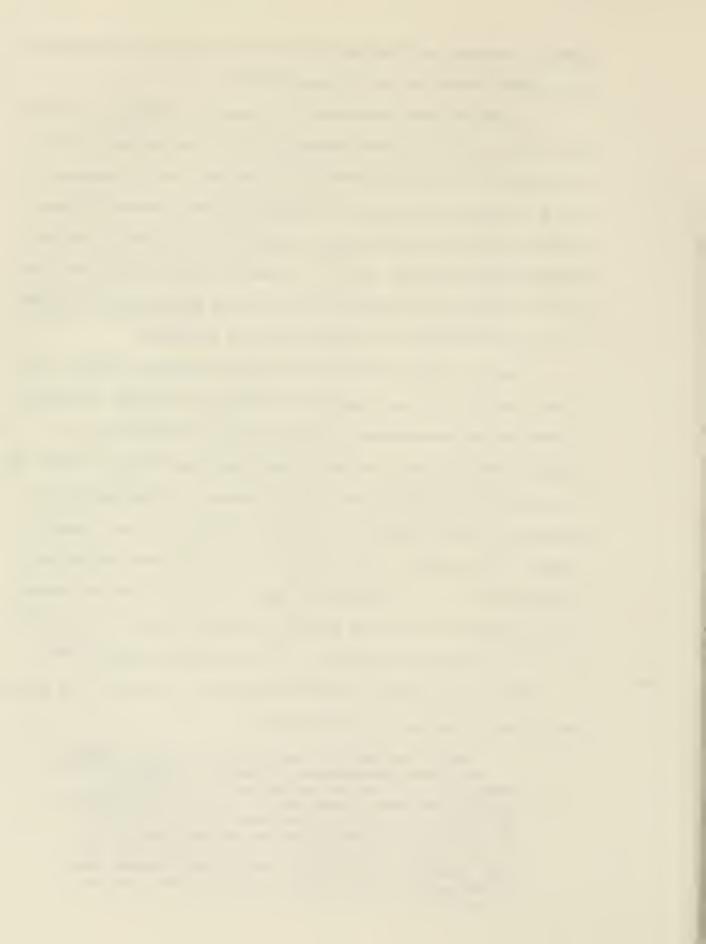
public squares, and struggling against avarice to preserve the green shores of our Delaware."144

A later writer discussed the issue of clean air, writing that "[t]he constant accumulation of animal and vegetable matter in cities necessarily renders the air impure, and the air being the natural food of the lungs, when vitiated affects the bodily and mental health of the people who are compelled to breathe it." Indeed it would seem that the entire future well-being of the city of Philadelphia depended on the existence of a park for its citizens.

Finally, the relief of the populace was at hand: the Consolidation Act was passed in February of 1854. Besides extending the boundaries of the City to include all of Philadelphia County, the act also provided "that it shall be the duty of the City Councils to obtain, by dedication or purchase, within the limits of the said city, an adequate number of squares or other areas of ground, convenient of access to all its inhabitants, and to lay out and maintain such squares and area of ground as open and public squares for the health and enjoyment of the people forever." 146

This measure met with great approval, causing one writer in 1855 to state the following:

Public attention has recently been aroused to the great importance of parks. Indeed, their necessity for the preservation of the public health and their inestimable value in affording the means of exercise and healthful recreation, is so generally acknowledged throughout the world, that it is difficult to account for the long apathy which existed among our former Councilmen and District Commissioners upon the subject. 147



Now the problem and task of locating the right spot for this park needed to be addressed. Many argued that the land between the Fairmount Water Works (where there was already a public garden) and the northern limits of the Spring Garden Water Works (including the Lemon Hill and Sedgely Estates) would be ideal. Not only would the water supply be protected from contamination, but the citizens would also be furnished with a "large, elegant and central public Park, abounding in natural beauties, with extended lawns, groves, and water scenery, easy of access from all parts of our extended city 148 There were, however, those with opposing views, as illustrated by an 1854 editorial from the Public Ledger, which stated: "The editor thinks that Lemon Hill is no place for a public park and that for want of population, it will not, for scores of years to come, be of any use to the public for such a purpose."149

These concerns were paralleled throughout the United States at this time in what amounted to a nationwide Park Movement, the most famous result of which was the establishment of Central Park in New York City. 150

On September 28th, 1855, a resolution proposed by the Committee on City Property was also passed by the Common Council, and Lemon Hill became the seed from which Fairmount Park as we know it today would grow. Thus, the preservation and restoration of the site of Lemon Hill is an important aspect of the heritage of Philadelphia.

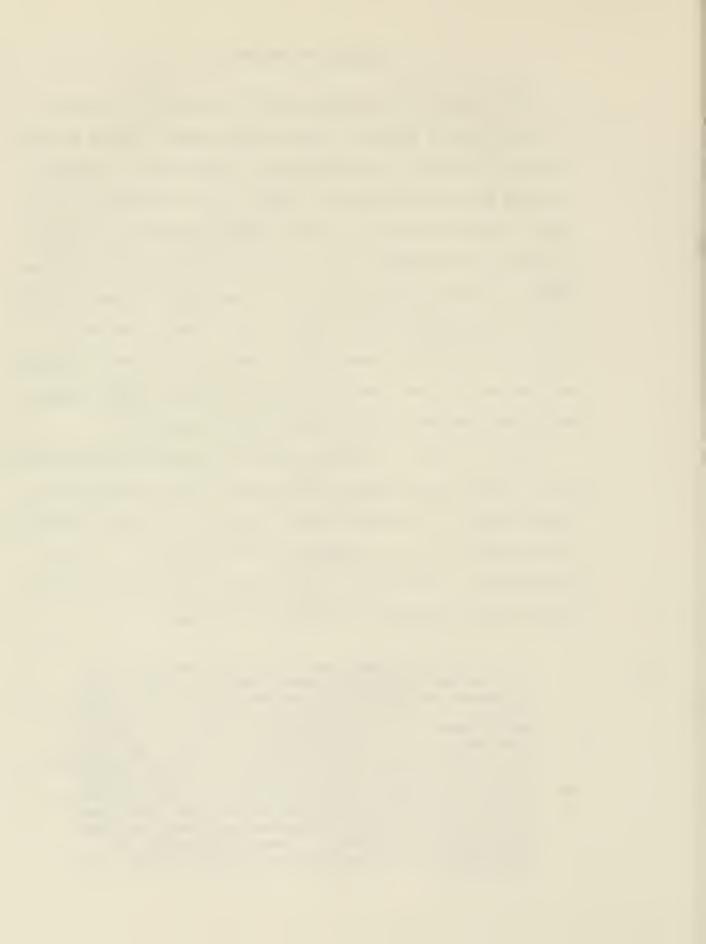


Design of the Park.

Once Lemon Hill was set aside for a park, it appears that there was a period of time that elapsed before anything was done to improve the property. Nonetheless, the estate was used by various people. There exist references to "an event in which almost the entire German population of the city were participants" This was the musical jubilee, which, in 1857, would begin at the Academy of Music with an oratorio performance "and which, with a ball, parade, a concert, a picnic at Lemon Hill (see fig. 5), and a banquet, was kept up for four days, bringing together many singing societies from the Eastern and Middle States." 152

Then, in 1859, one year after the Olmsted-Vaux plan for Central Park was adopted, the Sidney & Adams plan for the "Improvement of Fairmount Park" (fig. 8), for which they won a 1st prize award, was adopted by City Councils. In the description of their plan, they discuss the merits of the site for the purposes of a park, as follows:

A Public Park, having for its object the recreation of the citizens, should present the greatest possible contrast to the artificiality of the city, with its straight and closely built up streets. It is fortunate, therefore, that the location and configuration of the land here, is such as to admit of a large number of winding drives and walks, with little expense for cutting or grading; the undulations of the surface being so numerous that the drives and walks may be nearly all hidden from one another, and thus the effect of a park of immense size may be obtained in the comparatively small space allotted to us.



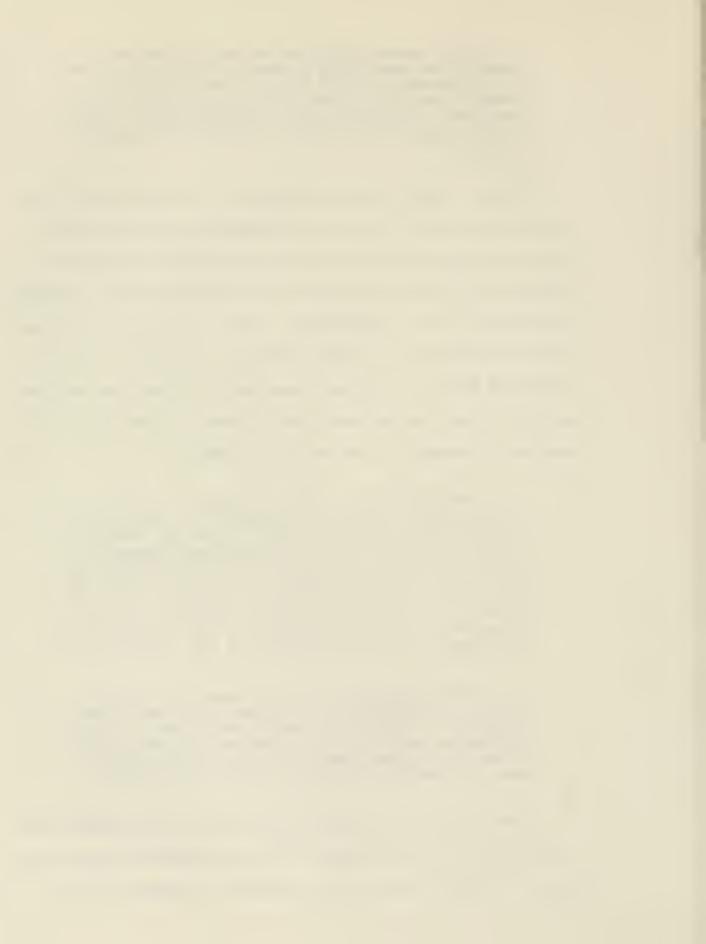
The natural features of the ground are, happily, so park-like already, that little more art is necessary than to complete what is already so perfect in outline; we have therefore avoided everything formal or geometrical, except where some especial object showed it to be desirable. 153

Sidney & Adams also proposed the introduction of "the greatest variety of trees and shrubs that can be made to serve the purpose of the landscape gardener" for the instruction of the public, adding the advantages of a "popular arboretum." The educational aspect of a public park was taken very seriously in the nineteenth century, the park experience being considered important for both re-creation and education. As for the trees already on the property, they are discussed in the following manner:

The principles we have adopted for our guidance will lead us to preserve the many fine trees already on the ground; (some of them, for instance, specimens of the <u>Celtis occidentalis</u> or "nettle tree", being considered the finest in the State;) we will except only the few that may be in the way of necessary drives, also the fruit trees which age has rendered unsightly [remnants of Morris's garden?], and which might be defaced by the thoughtless for the sake of their fruit.

Even the oval plantation near the large hickory, unsightly as it is in its present condition, we propose to leave; and by adding dwarf evergreens and shrubs inside and outside, so to alter its appearance as to make it one of the most interesting features on the grounds. 155

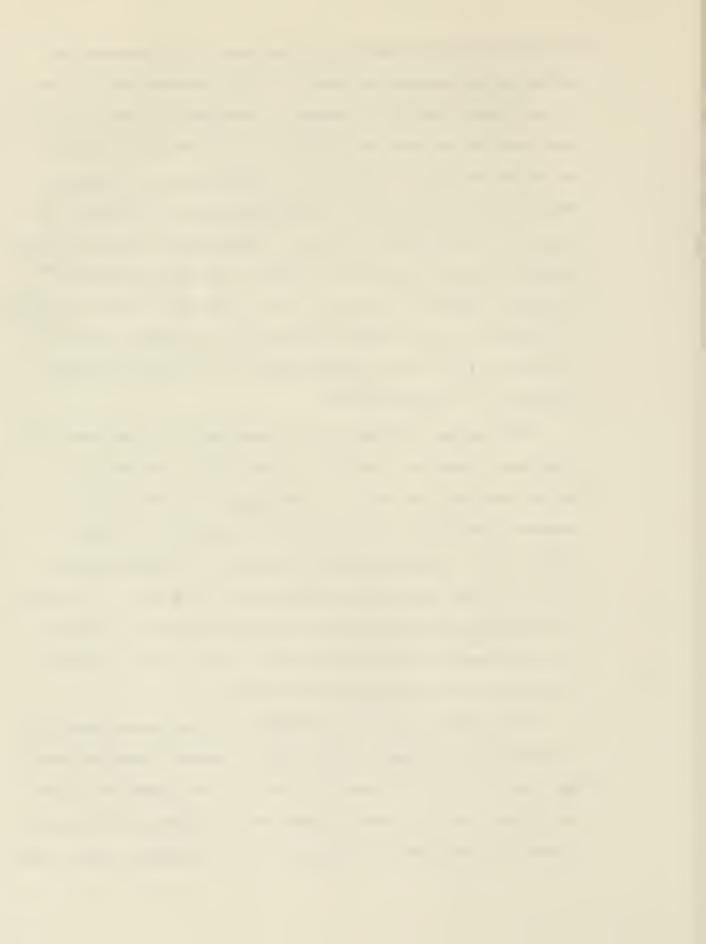
Other remnants of the old Lemon Hill estate were to be incorporated into this plan. The buildings were seen as an asset to be made "useful and ornamental, without much ex-



pense."156 The old mansion house was to be restored and dedicated to the public use. 157 "The Terraces to the east of the house [fig. 9], instead of destroying, we propose to turn into an interesting feature not often seen in parks, but which the small instances in Washington and Franklin Squares, show to be highly appreciated by the masses. We mean the introduction of beds of roses and flowering shrubs. These terraces are prettily adapted for this purpose. 158 "The small pond at the foot of the bank [fig. 10] we propose to clean out, wall around, and enlarge slightly; stock it with gold-fish, which always prove to be very attractive, especially to children. 159

This passage refers to the popularity of the "beds of roses and flowering shrubs," or the like, that were so appreciated by the public in Washington and Franklin Squares. Because of the geometrical nature of these squares, they were undoubtedly planted in the geometric mode, the same type used at Lemon Hill by Pratt. It is not unreasonable that the public's appreciation and even the very existence of these plantings are due to the earlier influence of the gardens at Lemon Hill.

Even though the plan of Sidney & Adams was adopted by City Councils on March 3rd, 1859, it appears that not much was done for a while, possibly due to the outbreak of the Civil War. In his diary, Sidney George Fisher gives us a glimpse of the grounds of Lemon Hill on November 21st, 1861:



... drove to Fairmount Park [Lemon Hill and Sedgley]. It is a rolling piece of ground, commanding fine views of the river, but unfortunately has but little timber, that having been cut down some years ago by Isaac Loyd, a speculator who bought one or both these estates. Before that act of vandalism, it was beautifully wooded.

Not much work appears to have been done at the park, except to make some winding drives. A few clumps of trees, most of them evergreens, have been planted, but seem neglected. No work is going on there now, the city finances not being very flourishing during the war. 160

Further Development of Fairmount Park.

As Fairmount Park grew to its present size by subsequent purchases by the City of land on both sides of the Schuylkill River, Lemon Hill was very much a part of the story of that growth. Late in the nineteenth century a music pavilion was built on the site of the old terraced gardens (fig. 11). It was here that, beginning in 1902, the Lemon Hill Association, whose motto was "The Best for the Neediest," held non-sectarian Christian meetings every morning, afternoon and night during the summer months. They also conducted Saturday outings to the grounds of Lemon Hill for poor inner-city children, where they would be served ice cream and told Bible stories. 161 Promotional material dated 1911 gives the following account:

Since 1902, Lemon Hill, Fairmount Park, Philadelphia, Pa., has been a centre of pleasure and help to thousands of people of all classes. Every year has witnessed an increase in the number of benefactors and beneficiaries who have made this beautiful place (and to many a sacred



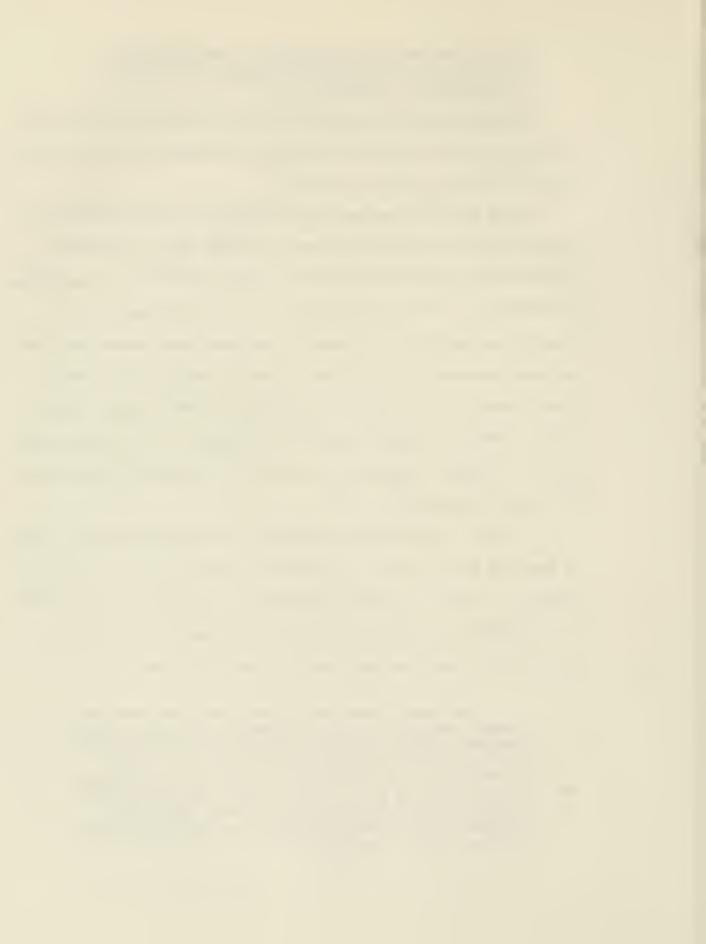
spot) the centre of giving and receiving the best things a Heavenly Father has graciously provided for a needy world.

The music pavilion also brought pleasure to thousands of music lovers as the site of band concerts for many years until it burned down in $1936.^{163}$

Fiske Kimball became the director of the Philadelphia Museum of Art in 1925, and was provided with the "pretty dilapidated neighboring house at Lemon Hill" as a residence. The Kimballs, with the assistance of the Fairmount Park Commission and the Art Museum, "restored and furnished the handsome mansion in eighteenth century style." There Fiske Kimball lived until his death in 1955. Even though both he and his wife, Marie Goebel Kimball, were architectural historians, apparently neither of them ever published any work on Lemon Hill. 165

In 1957, Philadelphia Chapter II of the Colonial Dames of America took over the Lemon Hill mansion as their head-quarters, which they have retained to the present time. 166 In 1963 there was some talk of making Lemon Hill the official mayor's mansion, but nothing materialized. 167

The scene thus extolled is obliterated at present among the attractions of a vastly larger domain; but it is well to remember that, near the entrance of Fairmount Park, there is included as a mere contracted nucleus, an earlier masterpiece; a plot which, after having served as an estate for the Revolutionary financier, became in our fathers' youth the most elaborate garden in the country. 168



DOCUMENTATION

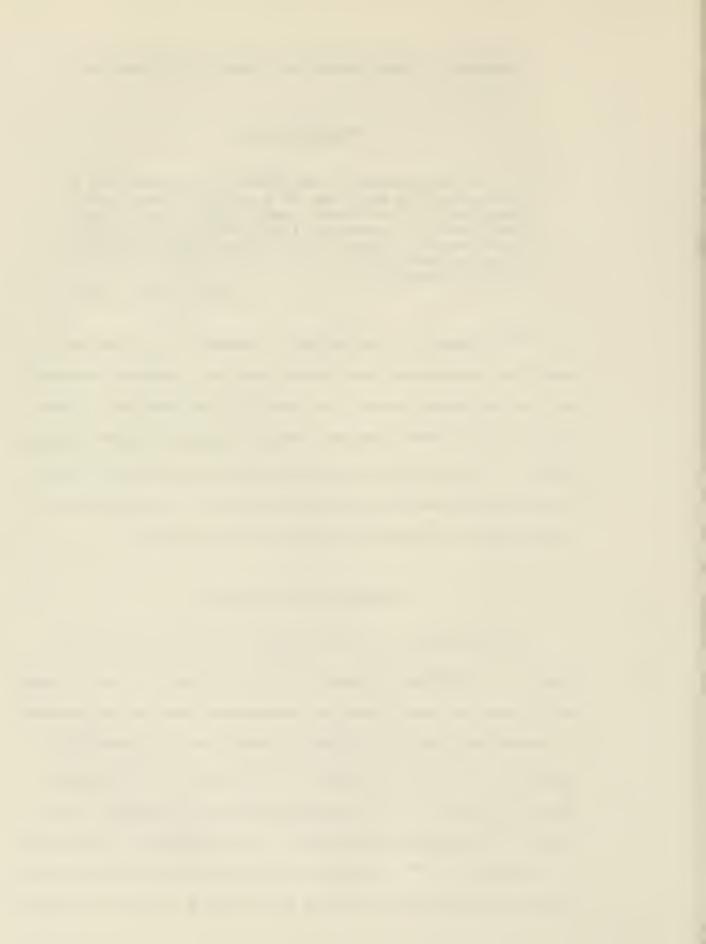
A greenhouse is now generally considered an indispensible addition to a garden of any pretension; and, as Cowper says, 'Who loves a garden loves a greenhouse too', for the very efficient reason, that 'there blooms exotic beauty, warm and snug, while the winds whistle and the snows descend.'

Agnes Catlow, 1857.

The attempt to reconstruct a garden or a structure should be undertaken with great caution. Arduous research must be performed, both site specific and archival. One must first consider the very basis of preservation theory before one begins any work on the site, in order to avoid mistakes that could be costly in terms of time spent, and irredeemable in terms of material culture lost.

Preservation Theory.

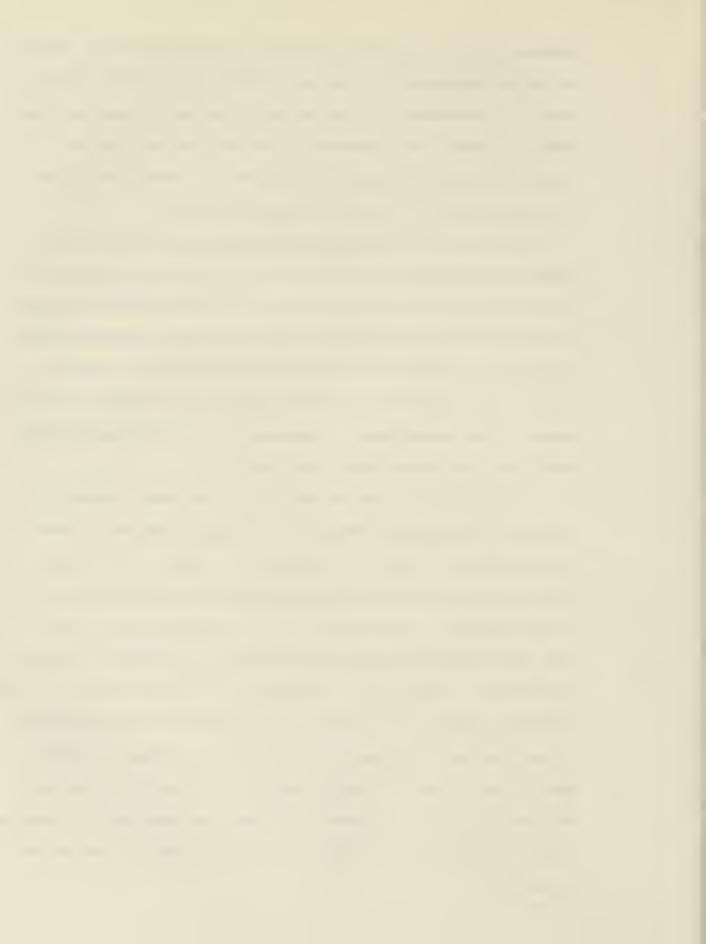
Preservation is often thought of as "management of change." Whether directed at an architectural or a land-scape feature, the process of management should not destroy or lessen the value of historic fabric as a documentary witness to changes in tastes and styles." One must be especially aware of this when dealing with historic land-scapes. "A garden is one of the most perishable evidences of a culture" Not only are you dealing with the site as an artifact, but the basic nature of a garden prescribes



change. Plant materials grow, are altered, and die. Paths and other features sink and are covered over. The weather itself is constantly altering the site, not to mention the effect of human intervention in the initial molding of nature, subsequent changes in styles and taste, and often the intervention of vandalism and/or neglect.

An article in the <u>APT Bulletin</u> states that it is "ad-visable to document the evolution of an historic garden, to read the contours, and to arrive at solutions which balance the philosophical ideals of conservation and the practical realities of the site." One important thing to keep in mind is that the role of preservation is to conserve, not to design. The researcher or proponent of the reconstruction should act as conservator, not designer.

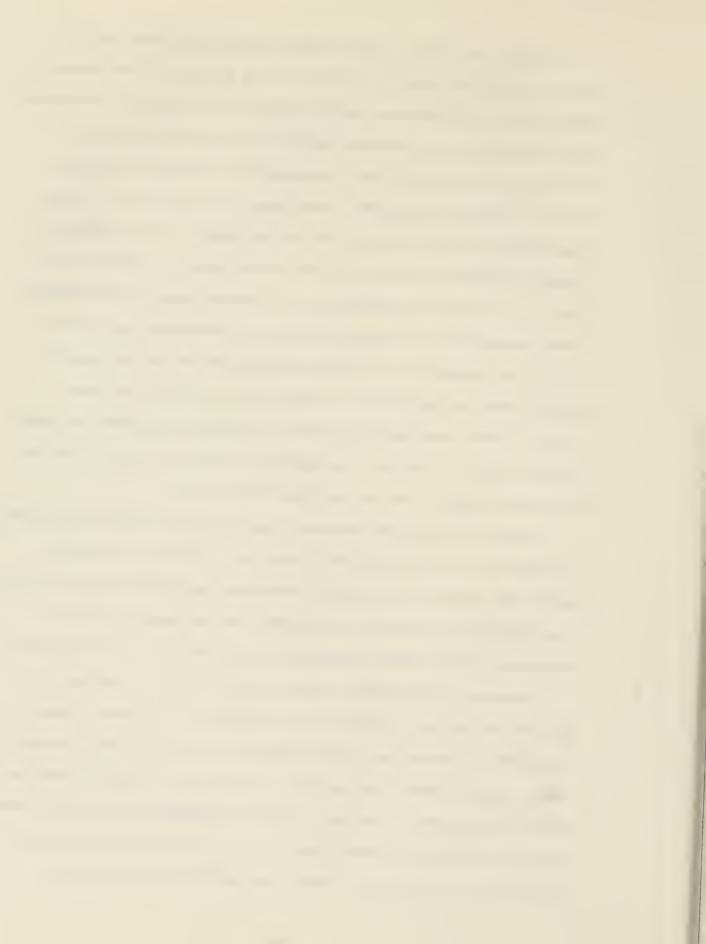
One case study may be used to illustrate a number of points. At Belleview Terrace in Kingston, Ontario, there was an attempt in 1967 to restore the garden to the year 1849, the time when Sir John A. MacDonald, Canada's first Prime Minister, lived there. This attempt seems to have been made without adequate forethought on the part of the undertakers, resulting in "stripping the site of many of its existing features. A garden was installed with features of the desired time period, but not considering the realities of the site. The worst part of the installation was the destruction of evidence of human interaction with nature over a period of time longer than the selected time period presented.



Later, in 1975, a new project was undertaken, still with the target date of 1849, but the project team "stipulated that the historic authenticity of the period landscape was dependent upon research producing historical data required to reconstruct the landscape environments of that time." Had this approach been taken originally, at least there would have been more solid evidence in the garden itself regarding that which had been there at that time. Finally, it was concluded that, although the site commemorated MacDonald, its real value as an historic garden is that of a document of a Victorian garden which had been established on the site by a well-to-do family in the 1860s. That this site-specific evidence had been stripped away in order to return the garden to an earlier period is the unfortunate reality of this case study.

The basic lesson learned from Belleview Terrace is that one must do one's research, learning as much as possible about the site, its history, associations and context. Only then may one proceed, but always with extreme caution, restoring "only those features which could be documented." 10

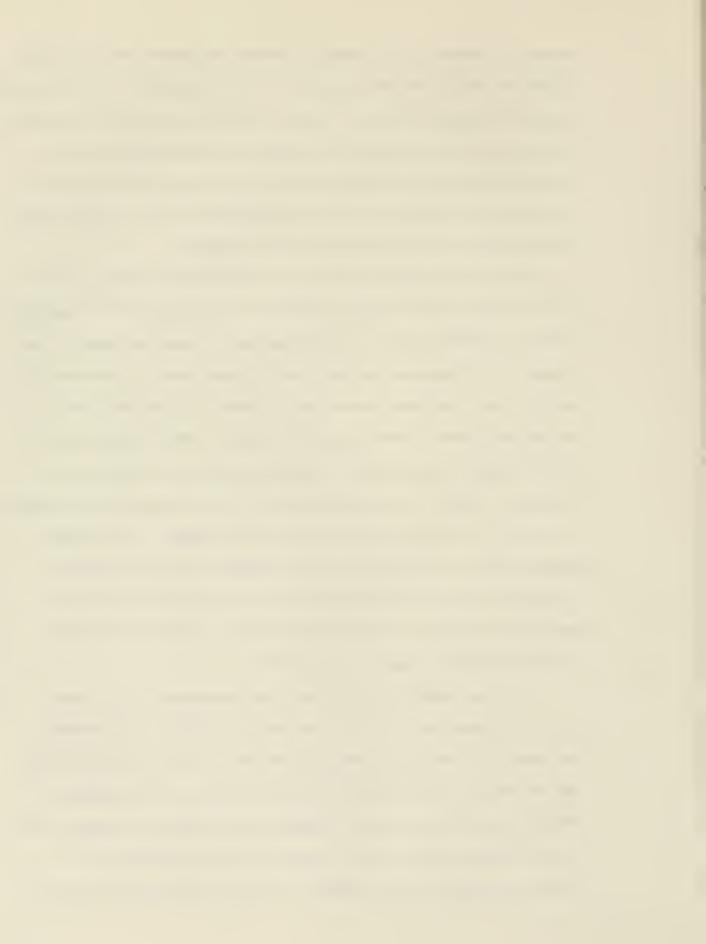
Research takes many forms, whether for a garden, a structure, or any other type of material culture. This includes information from documentary sources such as paintings, engravings, photographs, and maps. Written descriptions from deeds, diaries, letters, journals, and other accounts of the site itself may yield results. Contemporary writings on the general topic may put the subject into



context. Comparative study of other artifacts of a similar location and/or period may be a valid approach. In the case of gardens specifically, lists of plants available and popular at the target period would prove indispensable, even when site-specific information on plant materials is available, as they may be useful to confirm the test results and help to fill in any gaps which may appear.

One of the best sources of information exists in the site itself, which bears evidence of most of the alterations which have taken place. Above-ground archeology may reveal a wealth of information for the trained eye. An archeological dig may disclose locations of past structures, walls, walks and fences, even tree locations. According to Joel Fry, 11 paths constructed of brick, gravel, or most any material, tend to sink with time. This tendency facilitates the task of locating patterns in the garden. In certain cases, core samples may be taken which not only reveal various strata of disturbance, but also, through microanalysis of pollen trapped in the soil, may show exactly what plants were used and where. 12

In this study we consider the greenhouse which was built at Lemon Hill, with the goal of laying a groundwork for possible future investigation which would utilize some of the more costly methods outlined above. The present archival and above-ground research may prove invaluable for future archeological work. The archival research, of course, includes the attempt to find visual documentation.



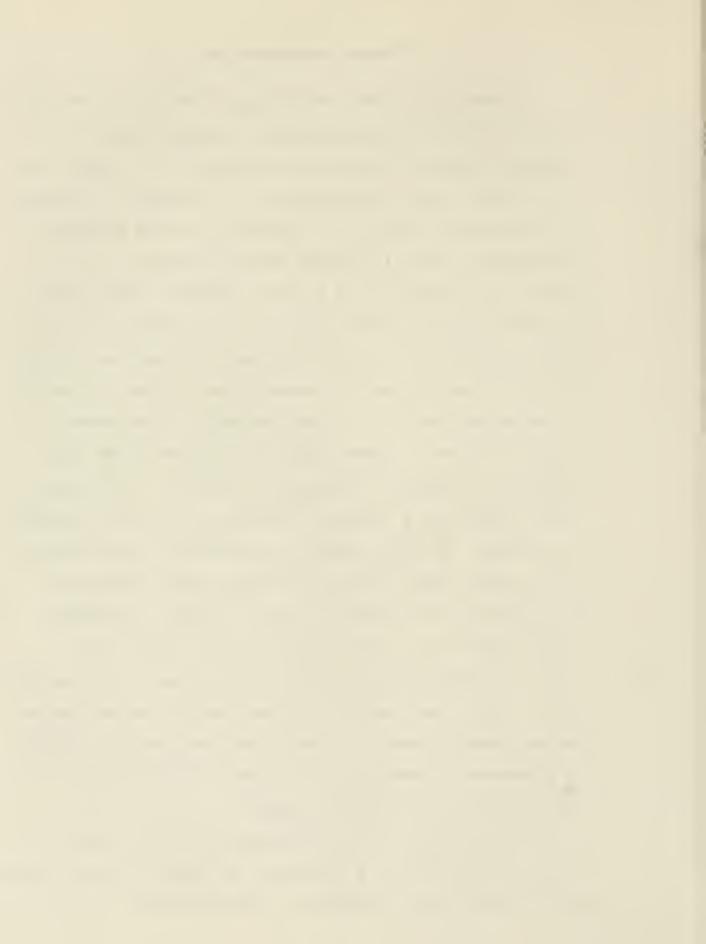
Visual Documentation.

A number of artists' renderings of Lemon Hill and the vicinity include the greenhouses as a major object in the landscape. Study of these depictions gives us a good idea of the form of the greenhouse and its situation on the site. The first known view of the structure is a 1794 sketch by Jeremiah Paul (fig. 12). Some use this picture as "the final link in the chain of evidence needed to settle what may now be stated as fact - until recently the subject of much uncertainty - that today's Lemon Hill mansion in Fairmount Park was not Morris's house either in its original or in remodeled form."13 It shows the central "hot house of fifty foot front on each side," as described in the 1797 "Schedule of Property" discussed in Chapter 2. The south facade appears as a two-story structure with five registers of openings, the lower windows large and tall with semicircular arched heads, and the five upper-story windows of a more regular size, possibly 6 over 6 lights. A chimney flanks either end of this central portion, which has a hipped roof and possibly a balustrade at the of the roof and walls. The wings, "each fifty feet long" 14 are depicted as having glazed slanted roofs and short front walls, typical of greenhouse construction of the period (see below). A two-rail fence surrounds the complex.

In his ledger book, on November 15th, 1794, Robert

Morris paid \$15.00 for a "Landscape of the Hills Green House

&ca." 15 The present location of this painting, or if it

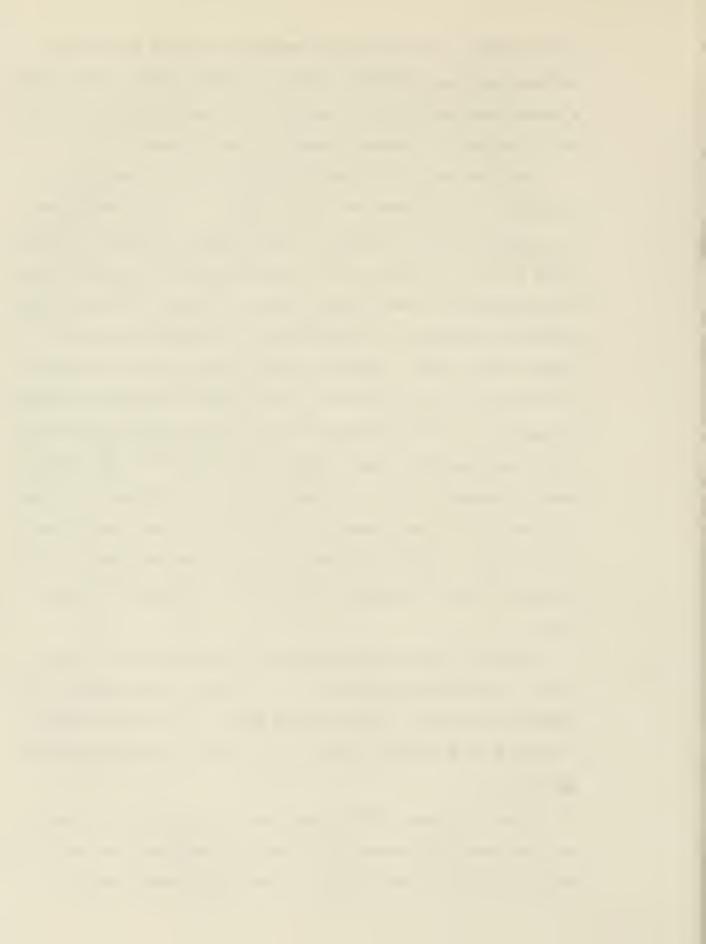


still exists, is not known. Perhaps it would give more information than the Paul sketch, perhaps not. At any rate, a comparison would prove valuable in negating the possibility of "artistic license" taken by the artists.

The next work available for this study is an 1807 painting by John Woodside (fig. 13). 16 In this rendition, the greenhouse has undergone some rather significant changes since 1794. The central hot house has been enlarged by two more registers on each side, making a total of nine. This extension includes but one story on the front (albeit a rather major story), and the roof slopes up to the top of the second story in the back. The upper five story windows now appear as low, horizontal voids, while the large lower story openings have lost their arched heads and the central opening appears to be a doorway, which is difficult to distinguish in the Paul sketch. The glazed wings appear the same, although the extension of space from the central portion was taken from them, and chimneys now appear at each end.

Whether these changes were by the hand of Morris or Pratt, one may only guess. It is, however, reasonable to consider that these changes were part of the construction mentioned in Morris's journals just prior to his escape to The Hills.

That the Lemon Hill estate is located on a hill above the Fairmount Waterworks is a double blessing. Not only did the concern over the purity of the city's water supply at



the Waterworks help to save the property from development, but the structures thereon appear in a number of depictions of the Waterworks, itself the subject of many an artist's attention. An 1824 engraving by R. Campbell entitled "View of the Dam and Water Works at Fairmount, Philadelphia" (fig. 14), shows some further modification. The east glass wing appears to be enclosed and the west wing has been lengthened. There also is a board fence erected around the green-house and a rail fence continues to surround the mansion.

Several works published by C. G. Childs in 1829 give a view of an even more expanded west greenhouse wing. "Fairmount Waterworks From The Basin" (fig. 15) shows this wing to be the same length as the central block, and the east wing appears glazed again. "Fairmount Water-Works from the Reservoir" shows a Greek pediment and classical-looking forms on the main greenhouse structure (fig. 16). Some of this may be artistic liberty, particularly since the structure is in the background and not the main subject of the work. By this time the structure probably had reached its dimensions of "220 feet long by 16 broad" as indicated in the report of the visiting committee of the Pennsylvania Horticultural Society in 1830. 19

Nicolino (Visconte di) Calyo executed a watercolor titled "View of the Waterworks" (fig. 17) in 1835-36 in which the greenhouse of Lemon Hill appears as a prominent feature on the far bank of the Schulkill. It is, however, difficult to make out much detail on the building. An 1838

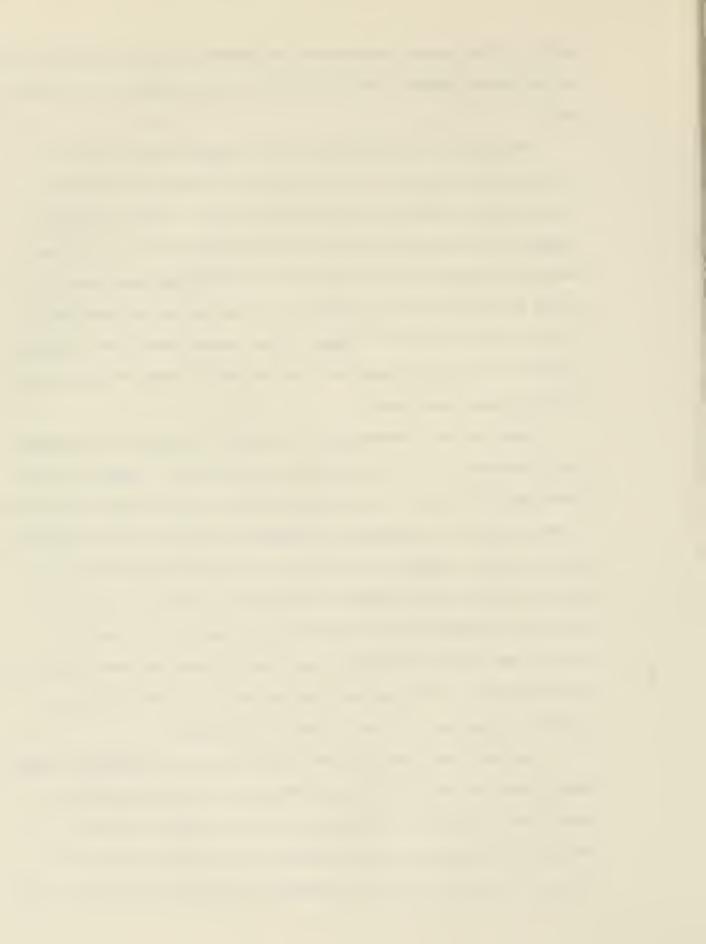


print of Fairmount Waterworks is taken at such an angle that no buildings appear, only the fence where Lemon Hill should be. 21

There are, additionally, some unexpected sources of pictorial evidence for this particular estate. Lemon Hill would grace imported ceramics (fig. 18). "The greenhouse complex is prominent in all known views of Lemon Hill and was even exaggerated by the English manufacturers who produced transfer-printed ceramics illustrating Philadelphia's bucolic attributes." These views were taken from popular paintings and engravings of the period, 23 many of which have already been mentioned.

Maps are an invaluable source of information regarding the placement of the greenhouse on the site. They can also sometimes be helpful in determining the approximate dates of construction for various buildings, depending on the type of maps available and the accuracy with which the delineator depicted the site. Since most maps are devoted mainly to delineating the boundaries of properties, the layout of roads, and natural features such as rivers and mountains, it is of special interest to come across a map showing the actual footprint of a building of interest.

The earliest map studied which makes an attempt to show buildings at the Hills is the "Plan of the City and Its Environs," drawn in 1796 by P. C. Varle (fig. 19).²⁴
Although it shows one main house in elevation above the words "R. Morris," and four smaller structures farther north



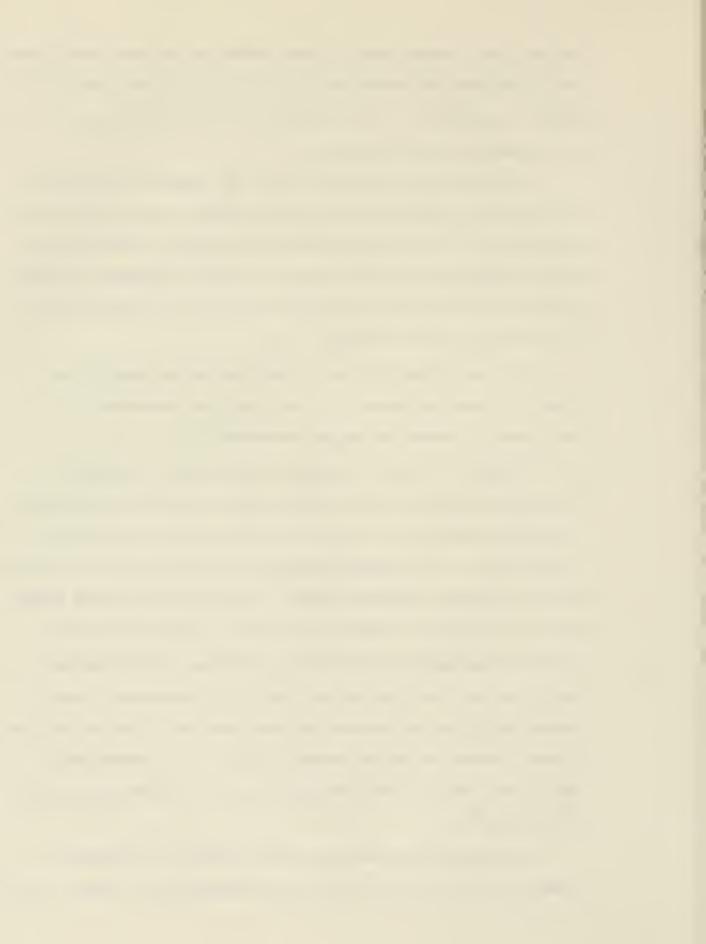
on the site, comparison of this rendering to other dwellings on the map and information that we have as to what should appear, leads one to the conclusion that this drawing is more symbolic than realistic.

A 1799 map by R. Howell (fig. 20) shows the boundaries of the estate with the words "Sold to Henry Pratt now called Lemon Hill." 25 On it are shown several small outbuildings and an L-shaped structure about where the farmhouse complex should be, but the map is completely blank on the site of the greenhouse and mansion.

William Allen's "Plan of the City of Philadelphia," drawn in 1828, includes only the very southeastern tip of the property noted as "Pratt's Garden." 26

We begin to find the mansion house and greenhouse delineated and sometimes labelled with the plan showing the "Fairmount Docks" (see fig. 7), which, because it shows "Lemon Hill" with the name "Knowles Taylor" above it, we may date to between 1836 and 1840.²⁷ This plan shows the estate being subdivided by streets and canals, and gives a footprint of the mansion house, the greenhouse (labelled as such), as well as the smaller dwelling (farmhouse?) and L-shaped building at what would have been the north end of the garden. These buildings appear again, in the same positions, on a "Map of Philadelphia," drawn on 1843 by Charles Ellet, Jr.²⁸

A map which may be from c.1851 (fig. 21) displays "Lemon Hill" as part of the "City Corpor[atio]n," and is the



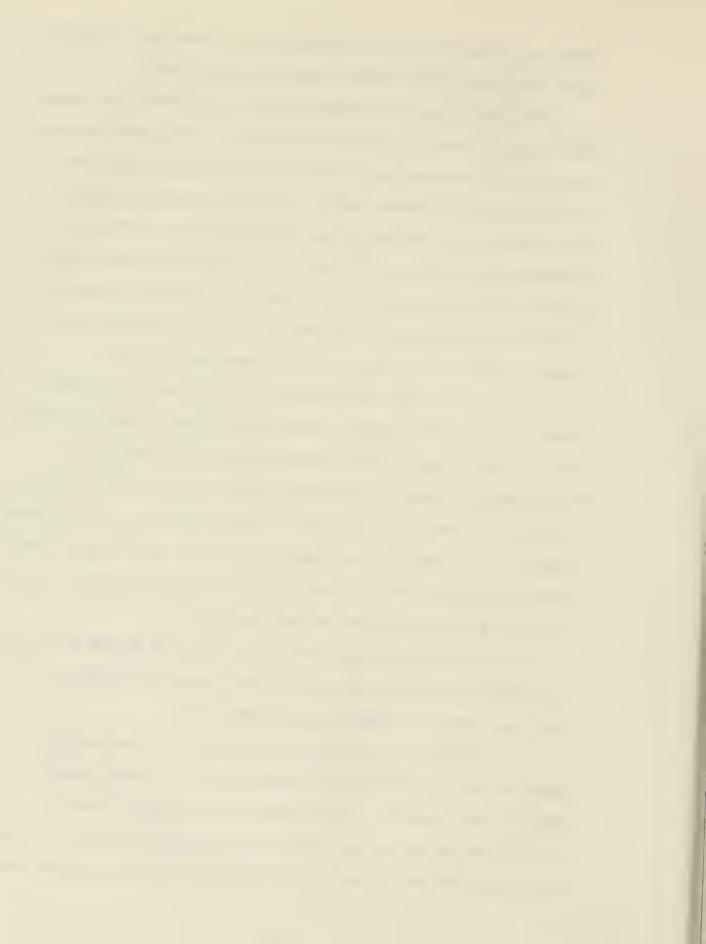
last map known to show the greenhouse, along with the mansion, smaller dwelling and L-shaped structure.²⁹

The 1859 "Plan of Fairmount Park" by Sidney and Adams (see fig. 8) shows and labels the formal "Terraced Gardens," but the only structures shown are the mansion house and possibly the old house, which is hard to distinguish. 30 That same year, Andrew Palles presented his own "Plan of Fairmount Park" (fig. 22), and while there are some variations in the pattern of drives and walks and his map includes the west bank of the Schulkill River, Mr. Palles shows no other buildings than the previous plan. 31

"Fairmount Park, Philadelphia, 1868" has the mansion house and terraced garden with the caption "Pratt's Garden. The following year, Worley and Bracher published a "Topographical Map of Fairmount Park," which shows a different, more curvilinear design of the paths in the terraced gardens. A Hopkins and Company atlas of 1872 labels the mansion as "Lemon Hill," and notes a "Mineral Spring" in a location within the area of the garden. 33

The Music Pavilion shows up in 1894 and again in a 1917 topographic map (fig. 23) that labels both the "Music Pavilion" and the "Lemon Hill Mansion." 34

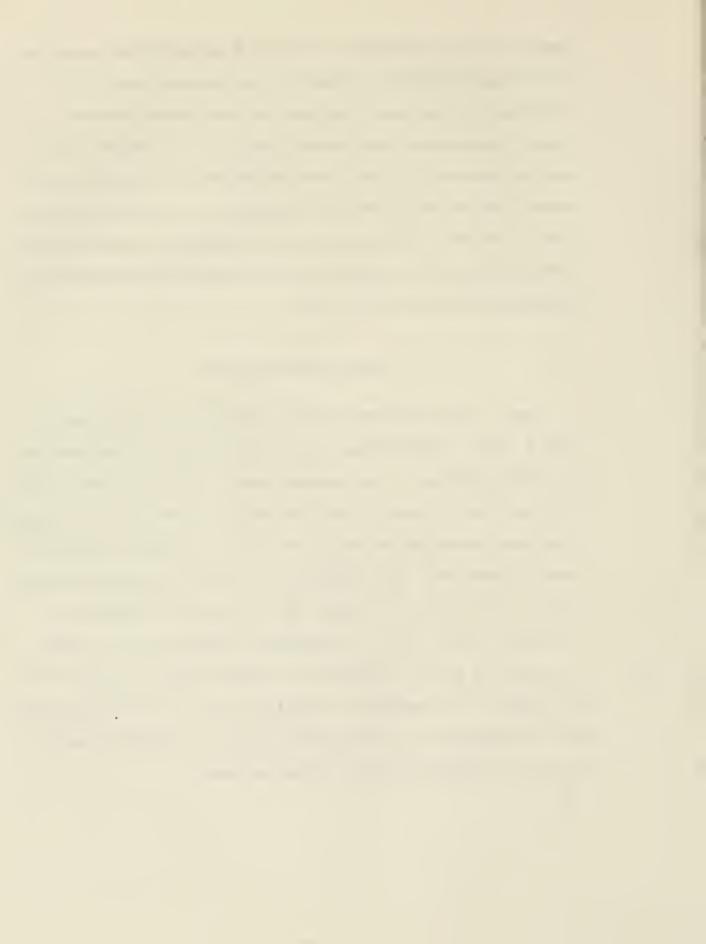
By adjusting the scale of the maps which show the location of the greenhouse to the scale of recent maps showing the location of the mansion and present roads through the area, we can overlay the two and come up with a very good idea as to the whereabouts of the foundations and



remains of the greenhouse. It would appear to be south of and perhaps inclusive of part of the present Lemon Hill Drive that circumvents the site of the formal gardens. Present topographic maps show a small bluff located southeast of the bend in the Drive, which very well could be the eastern end of the greenhouse complex. If one were to suggest a site for a dig this location may well prove to be of interest (fig. 24). Above-ground inspection yeilded clay potsherds and glass (fig. 25).

Verbal Descriptions.

Most of the primary source accounts of the building itself have already been cited in this study in conjunction with descriptions of the estate under both Morris and Pratt. Interpretion of some of the findings from the visual sources have been presented as well. The value of these accounts is readily apparent. An important additional and supplementary aspect of this type of study is the use of contemporary writings on the topic of greenhouse construction. These writings can help illuminate our understanding of just how the Lemon Hill greenhouse functioned and its historic precedent, enabling us to understand more fully exactly what we see in the paintings and written accounts.



PERIOD GREENHOUSE DESIGN & CONSTRUCTION

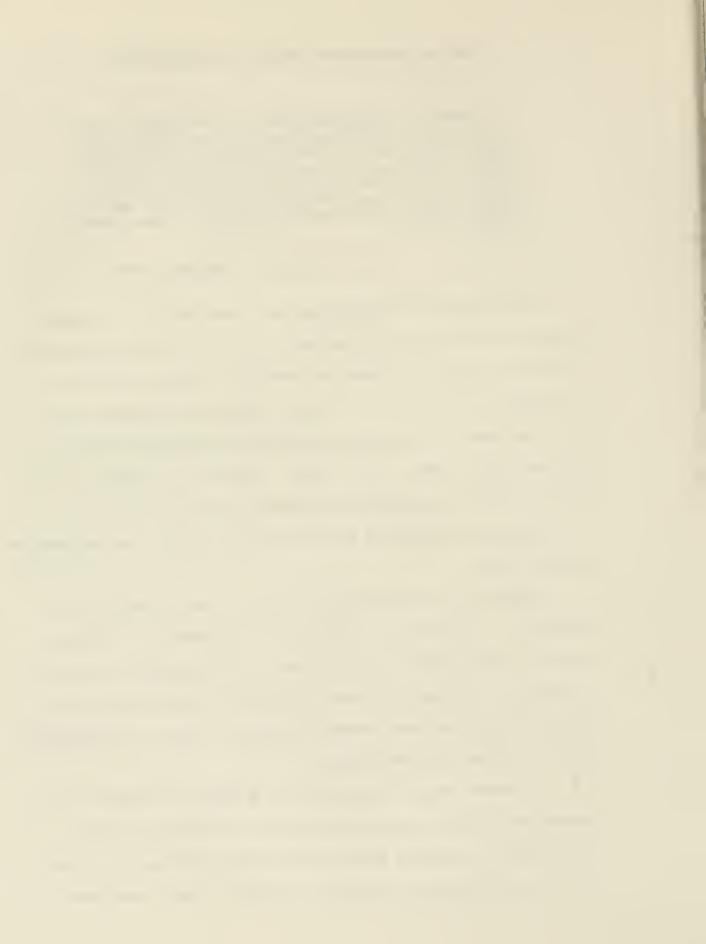
That the construction of hot-houses is very imperfectly understood among those who are generally employed to erect them, will appear evident to any one who shall investigate the subject in the slightest manner. Nor will this appear surprising, when we consider how very recently they have become general in gentlemen's gardens. 35

John C. Loudon, 1806

Our purpose for studying the construction of greenhouses in past ages is two-fold. First, we are attempting
to better understand what we perceive in the renderings
discussed previously, in terms of form and function, and
also the way in which our particular greenhouse fits into
the overall scheme of the time. Secondly, a greater knowledge of its construction increases the accuracy of our
anticipation of what we might possibly find in an archaeological study.

Possibly the best way to begin our scrutiny of the subject is to define a "hothouse" as opposed to a "green-house." Today the terms are used interchangably, but historically they meant a specific type of construction, although often the type seems to vary according to the person who is giving the definition.

"A Green house," according to M'Mahon in 1806, "is a garden building fronted with glass, serving as a winter residence, for tender plants from the warmer parts of the world, which require no more artificial heat, than what is



barely sufficient to keep off frost, and dispel such damps as may arise in the house, occasioned by the perspiration of the plants or a long continuance of moist weather."³⁶ In the greenhouse, plants were kept in pots or tubs on "stages", or what we today might call "risers", and these plants were removed in summer to the outdoors. A conservatory, on the other hand, was planted with beds and borders placed directly into the ground, the glass being removed in summer. M'Mahon continues, explaining that "Hothouses, or Stoves, are buildings erected for preserving such tender exotic plants, natives of the warmer and hottest regions, as will not live in the respective countries where they are introduced, without artificial warmth in winter."³⁷ This seems to be a rather fine distinction, the main differential being the degree of heat.

To add to the confusion, in the same year, (1806),

Loudon refers to all buildings for growing plants as "hothouses," further classifying them as "Stoves, Greenhouses,
and Conservatories." For the purposes of this discussion,
the central, solid-roofed structures are referred to as
"greenhouses," and the glass wings with greater heat as
"hothouses" or "stoves."

From the early seventeenth century, evidence shows that greenhouses were "mere chambers, distinguished by more glass windows in front than were usual in dwelling rooms." Indeed, this practice continued through the eighteenth century, those buildings often taking the form of two-story



structures, the second floor, under a solid, usually hipped roof, serving as a residence for the gardener or as a store-room. 40

This form, which was used for the greenhouse at The Hills, has an early predecessor in the Apothecaries' Garden at Chelsea, London, established around 1673. A 1751 plan by John Haynes (fig. 26) also shows a central two-story greenhouse, gardener's quarters above, with a hipped roof, and two hot houses or stoves flanking the central, substantially architectural building. 41

In his <u>Dictionary</u> of 1759, Philip Miller, who is credited with the design of the structure at Chelsea, shows an illustration of a larger house, this one about 200 feet long with a room above the central portion and a "stove-house" at each end. Another writer in 1750 tells of having just completed a big installation of "two stoves, with a little greenhouse in the middle, 170 feet long, the longest and finest he had seen Yet another example of this type of construction appears in John Abercrombie's The <u>Gardener's Daily Assistant</u> (1794), which shows a large greenhouse with seven registers of windows and a solid, slated, hipped roof (fig. 27).44

Bernard M'Mahon describes the practical application of this type of construction in the following passage from his American Gardener's Calendar (1806):

Some green-houses for large collections of plants, have two wings of smaller dimensions, added to the main building, one at each end, in

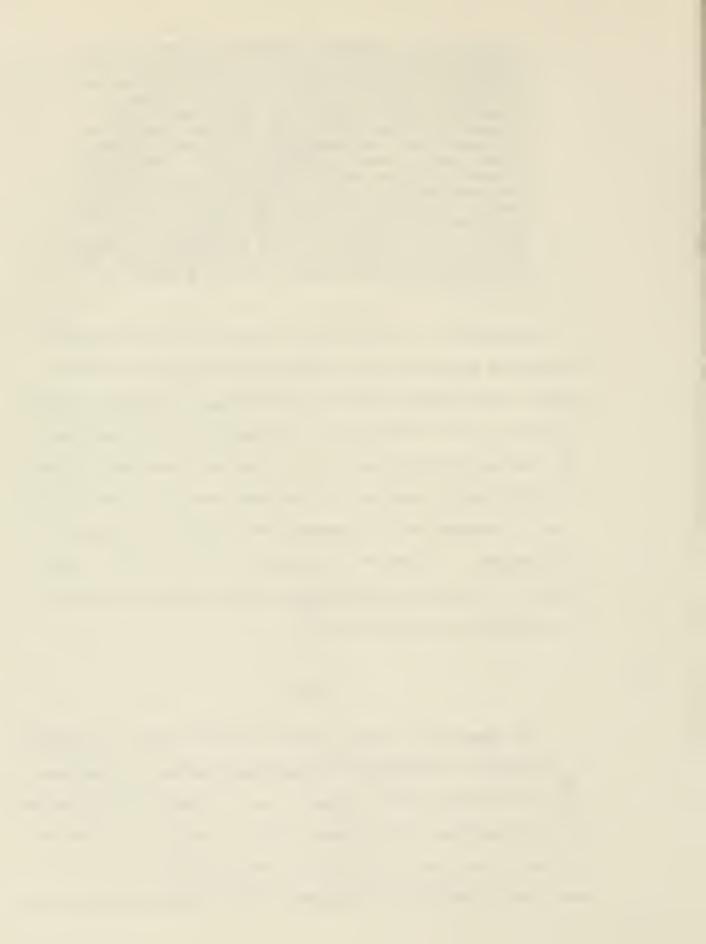


a right line, separated sometimes from it by glass partitions, and sliding sashes for communication, the front almost wholly of glass, and part glass roofs, as above observed; thus by these additional wings, the green-house will consist of three divisions, whereby the different qualities and temperatures of the various plants can be more eligibly suited. The middle or main division may be for all the principal and more hardy, woody of shrubby kinds, which require protection from frost only; one of the wings may be appropriated for the succulent tribe, and the other for the more tender kinds that require occasional heat in winter, yet can live without the constant heat of a stove or hot-house." 45

Apparently it would not be unusual for this central greenhouse structure to be used for dining, one writer states that "garden banqueting halls <u>cum</u> orangeries [were] enjoyed by the aristocracy in the seventeenth, eighteenth and nineteenth centuries both on the Continent and in England." Surely that which was good enough for the aristocracy of Europe was good enough for a wealthy merchant in Philadelphia. It has been related that, at least on one visit in 1795, George Washington dined with Robert Morris in the greenhouse at The Hills. 47

Siting.

The question of where one might successfully construct a greenhouse is addressed by numerous authors of the era. In 1832, Robert Buist, formerly one of Henry Pratt's gardeners, writes that "[t]he house should stand on a situation naturally dry, and if possible sheltered from the north west, and clear from all shade on the south, east and west,



so that the sun may at all times act effectually upon the house. The standard principle as to aspect is to set the front directly to the south. Any deviation fron the point should incline to east. This is precisely the orientation given by Robert Morris to the greenhouse at The Hills.

J. C. Loudon, writing in 1806, suggests that "[a] greenhouse may generally appear as an object in the flower-garden, but should always be well blended with vegetation." He further recommends a "small porch or archway of lattice-work, continued a few yards from each door" as contributing and "greatly heighten[ing] the effect in entering it." 49 Again, Morris had a similar idea in respect to planning the gardens to be adjacent to the greenhouse.

The Plan.

"The building ought to be of brick, or stone, having the front almost wholly of glass-work, ranging lengthwise east and west, and constructed upon an ornamental plan." 50 A change in taste and/or technology from the time of this writing to that of Buist in 1832 is made evident in the following remark of the latter:

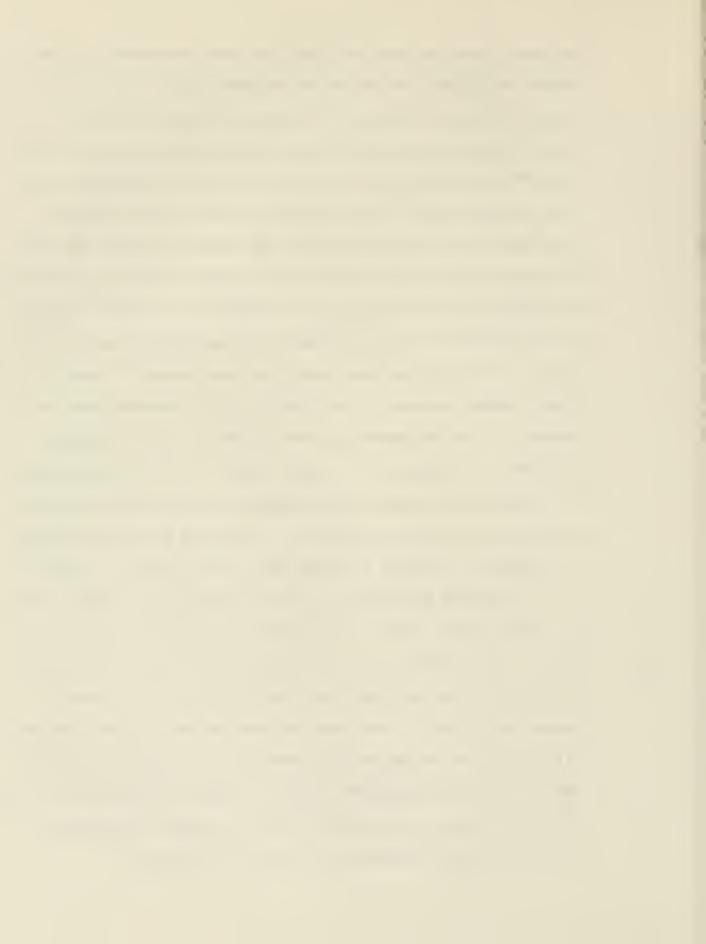
It was formerly the practice to build these houses with glass only in front, and even to introduce between the windows strong piers of brick or stone: but this is now abolished, and has given way to a light and ornamental style, by which cheerfulness and the desired utility are better consulted. 51

The length of these greenhouses is recommended to be



anywhere from ten feet to fifty or more, depending on the number of plants one would be accommodating. The house should be ten or fifteen to twenty feet deep, with the height to the top of the upright front glasses equal to the width. 52 Philip Miller, writing in the mid-eighteenth century, advises that "[t]he windows in front should extend from about 1-1/2 feet above the pavement to within the same distance of the ceiling which will admit a cornice round the building over the heads of the windows." He added that the house should be built of brick or stone, thereby making it possible to build a house over the greenhouse. 53 Later, in 1806, M'Mahon voices his opinion of this practice when he writes, "... as to erecting rooms over it, as is commonly directed, I disapprove of, such being not only an additional and unnecessary expense, but they give the building a heavy appearance; on the contrary, all pieces of garden architecture ought to display a light, gay, and sprightly taste."54

A hothouse description in 1804 states that "[t]he front and front half of the ends, should be formed of brick, to a height of two feet, upon which sashes five feet high should be erected; the back wall and the back part of the ends should be of brick, and much thicker at the bottom than top, with flues in the walls to form shelves, for pots to stand upon." Buist recommends that this type of structure be 12 to 18 feet high at back, and 6 feet in front, including a three foot brick basement to support the glass. 56

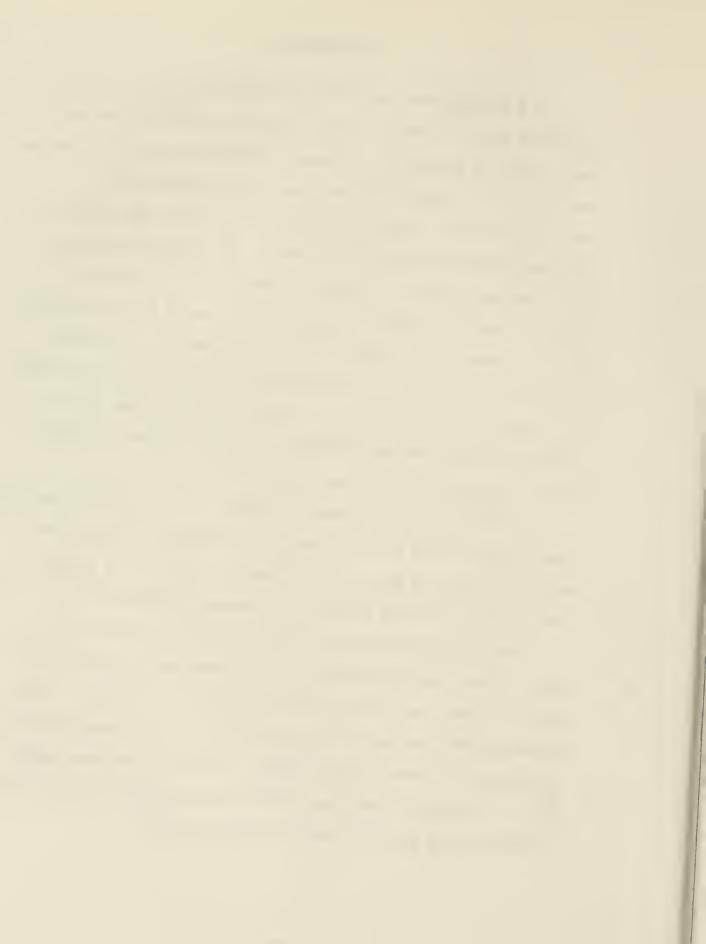


Fenestration.

In a greenhouse the idea is to admit as much light as possible from the south (front), so one would opt for as much glass as possible. M'Mahon recommends that the windows be five or six feet wide and the piers between them, if built of brick or stone, a width of two feet, against which folding interior shutters may fall. He even goes further with the suggestion of "sloping both sides of each pier inward, that by taking of the angles, a more free admission may be given to the rays of the sun." The bottom sashes should be within a foot or eighteen inches of the floor and the top within eight or ten inches of the ceiling, and so contrived that the sashes mady slide up or down "to admit air to the plants when necessary."

It would be appropriate to erect a "wide glass door" in the middle of the front, "both for ornament and entrance, and for moving in and out the plants," as well as a small door at the end "for entrance in severe weather." 57

The glazed roof of a hot-house wing would be at an angle of 43 degrees (Buist) ⁵⁸ or 45 degrees (Loudon) ⁵⁹ in order to admit as much light as possible in winter. Buist recommends a framing of Carolina pine. Glass panes should not exceed 6 inches by 10 inches, and should be overlapped by 1/4 inch when installed. Shutters should be of 1/2 inch white pine and painted every three years. ⁶⁰



During the period that corresponds with the hot-house construction of Morris and Pratt, two types of "stoves" (or hot-houses) are commonly discussed: the "dry stove" and the "bark stove" or "bark pit." A certain Mr. LeCour of Leyden in Holland is credited with the development of the bark stove around 1720.61 In such a stove, a pit 6 or 7 feet wide and 3 feet deep is usually filled with tanners' bark, or occasionally with earth, which by the action of its decomposition, generates warmth to surround "the most tender exotics and herbaceous plants" whose pots are placed directly into the bark.62 These stoves are kept at temperatures between 65 and 90 degrees,63 and are considered the most appropriate means of propagating "pines" or pineapples.

The "dry stove" requires some external source of heat and is generally the type thought of when discussing hothouses today, although the means of heating have changed over the years. Once again the Apothecaries' Garden at Chelsea enters the picture, for it was there in 1684 that the gardener reportedly introduced the dry stove when he "contrived flues under his greenhouse." The temperature is generally kept between 55 and 70 degrees. Sometimes one hothouse would incorporate both types of heating for the successful rearing of different types of temperamental species.

By far the most common type of dry-stove incorporated a furnace, built outside the house in the back or end wall,

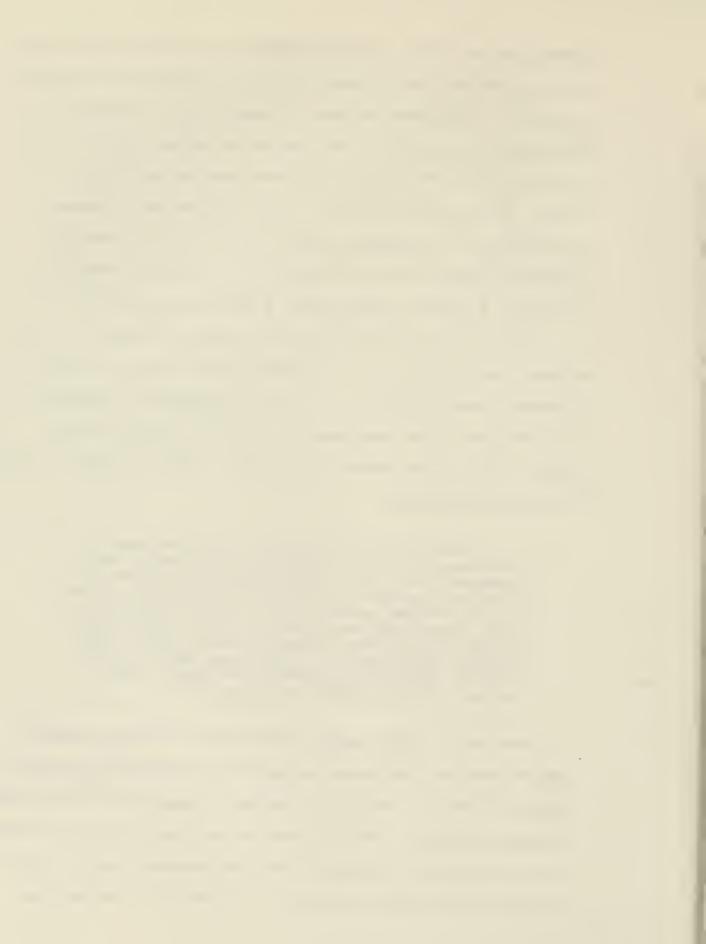


communicating with flues which were run around the perimeter of the house and built into the back wall with two or three returns. 66 Alternate methods of heating were attempted throughout this period. Heating by hot water "was invented in Paris in 1777" but didn't become popular until much later, in the 19th century. 67 "The application of steam to the heating of hot-houses appears first to have been attempted by Wakefield of Liverpool in 1788," but seems to have been a novelty rather than a usable apparatus. 68

Cast-iron stoves (of the type known as "Franklin stoves, not referring to a hot-house) were used into the nineteenth century, 69 but were not recommended, disdained both because of the uneveness of the heat throughout the house, and for the emission of smoke. M'Mahon offers us the following assessment:

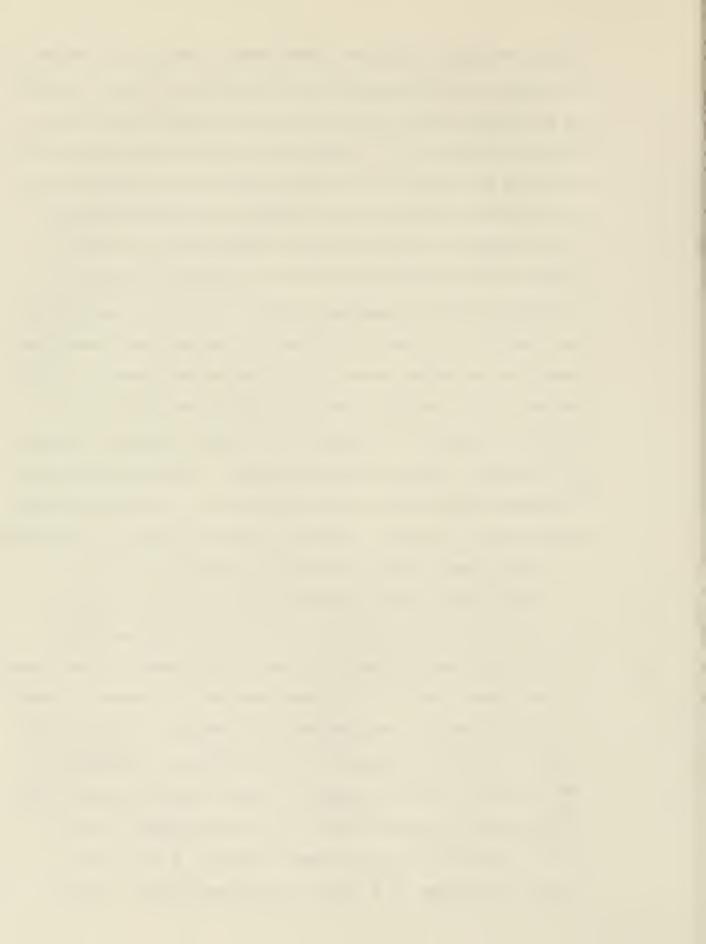
Sometimes where a Green-house has been well considered in these points [proper design and construction], all is confounded by the introduction of a mettle stove and pipes, which never can be managed so as to give, when necessary, that gradual and well regulated heat, which will protect the plants without injuring them; and, besides, both the stove and pipes unavoidably emit in the house a quantity of smoak, which seldom fails to annoy the plants.

Writing in 1835, Loudon states that "the most general mode of heating hot-houses is by fires and smoke-flues, and on a small scale: this will probably remain so." In 1759 Miller recommended, "as did everyone at the time, and as was to be the case for nearly another one hundred years," that a flue should be built about two feet from the front of the



house, 10 inches wide and 2 feet deep, running the length of the house, returning along the back wall and being "carried up in proper funnels adjoining the tool shed by which the smoke may pass off."72 Almost fifty years later M'Mahon has modified the flue a bit, stating that at the time of laying the foundation of the walls (which he recommended to be three bricks of 2 feet 3 inches thick to keep out the frost), that one should "[allow] due thickness for the erection of the surrounding inside flues in the foundation wall, with an allowance for their being detached therefrom about two or three inches." He also suggests that the flue running along the front and end walls be "raised wholly above the floor."73 All of this is done to better utilize all the heat flowing through the flues. Loudon would later recommend that the best flues be "built of thin well-burned bricks neatly jointed, with the bottom and top of tiles, and no plaster used either inside or outside."74

The furnace itself should be built below the level of the floor of the hot house, in order that the smoke may effectively rise through the flue system, which starts close to the floor level. It is described as a "chamber, or oven, to contain the fuel surrounded by brickwork, in which firebrick ... is used; a hearth of iron grating, on which the fuel is laid; a pit or chamber in which the ashes drop from this grating, and iron doors to the fuel-chamber and ashpit." The size of the furnace should be 2 to 4 feet in length, 18 inches to 2 feet in width and height, and the



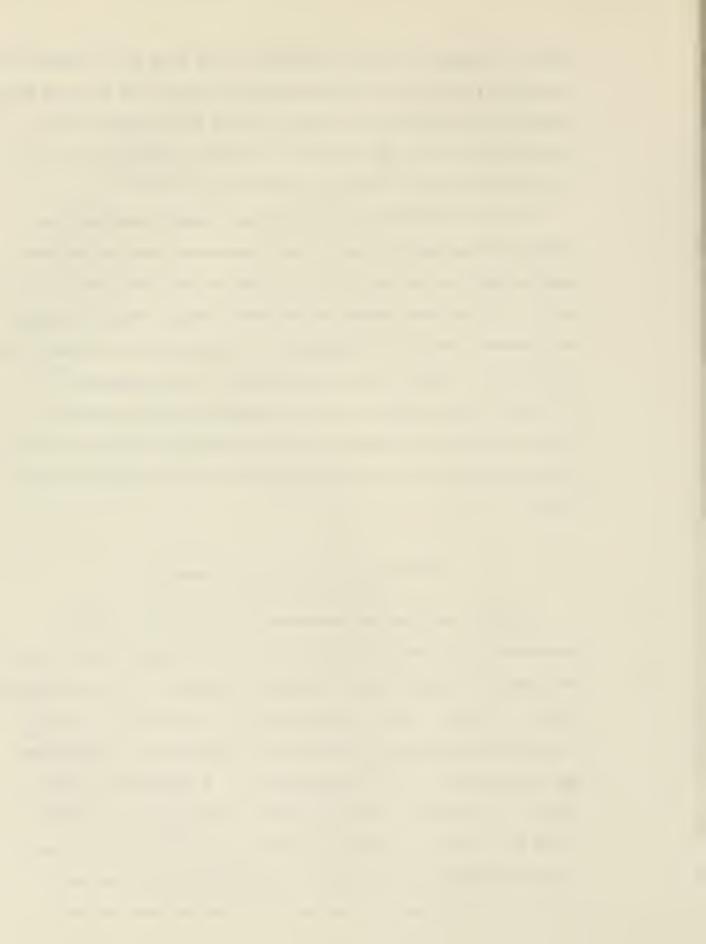
doors 10 inches to 1 foot square.⁷⁵ The size will depend on the type of fuel to be burned (wood or coal) and also on the length of and number of returns in the flue system, "for when there are but few returns, a greater quantity of fire will be necessary to keep a sufficient heat."⁷⁶

It is reasonable to believe that Robert Morris's furnaces were fueled by coal; references are made in his business ledgers to paying "Godfrey Gibbler for 280 bush[e]ls of Coal a 2/8 for Hot House" on November 17th, 1795, and again, on December 7th of the same year, to paying the same man "on acco[un]t of Coals delivered Landreth" (his gardener). 77

For this reason, because coal furnaces were built smaller than wood-burning furnaces, we would expect to find smaller-sized furnaces at the Hills during in-ground archeaological study.

Additional Construction Details.

In 1759, Miller recommended that the floor of the greenhouse be paved or tiled and be constructed two or three feet above the earth and "preferably arched to stop the damp rising in winter, which was harmful to plants." It will be recalled that Morris mentioned "an excellent vault under the greenhouse" in 1797 [see page 18]. M'Mahon also admonished the builder to "let the whole inside, both ceiling, walls and flues, be neatly finished off with good plaister and white-wash, and all the woodwork made with the most critical exactness, ... the whole to be painted white ...



and let the bottom or floor be paved with large square paving tiles, or some similar materials."⁷⁹ Because there are references to "bricks and tiles" in his ledgers, it is very likely that Morris would have had his greenhouse floor tiled, although it is also possible that the tiles were for the flue system.

It is suggested that a room or some portion of the greenhouse be set aside for use as a potting-house, "fitted up with a convenient table, with shelves and drawers for bulbs, seeds, and tools." In the 1759 edition of Philip Miller's Dictionary, there appears a plan for a greenhouse (fig. 28) showing "Sheds behind the Green-house and Stoves." This type of arrangement is again described by Morris as "two large rooms on the back or north front of this hot houses" 82

Construction of permanent horticultural structures was a major undertaking, not to be attempted in a careless manner. J. C. Loudon stressed this point in 1835, when he wrote that "Buildings with glass roofs, or artificial habitations for plants, constitute by far the most important part of garden structures, whether we regard the expense of their first erection, the skill required to manage them, or the interesting nature of their products." 83 Not everyone could have one, which surely was one of the attractions of this type of project for one as wealthy as Morris or Pratt.

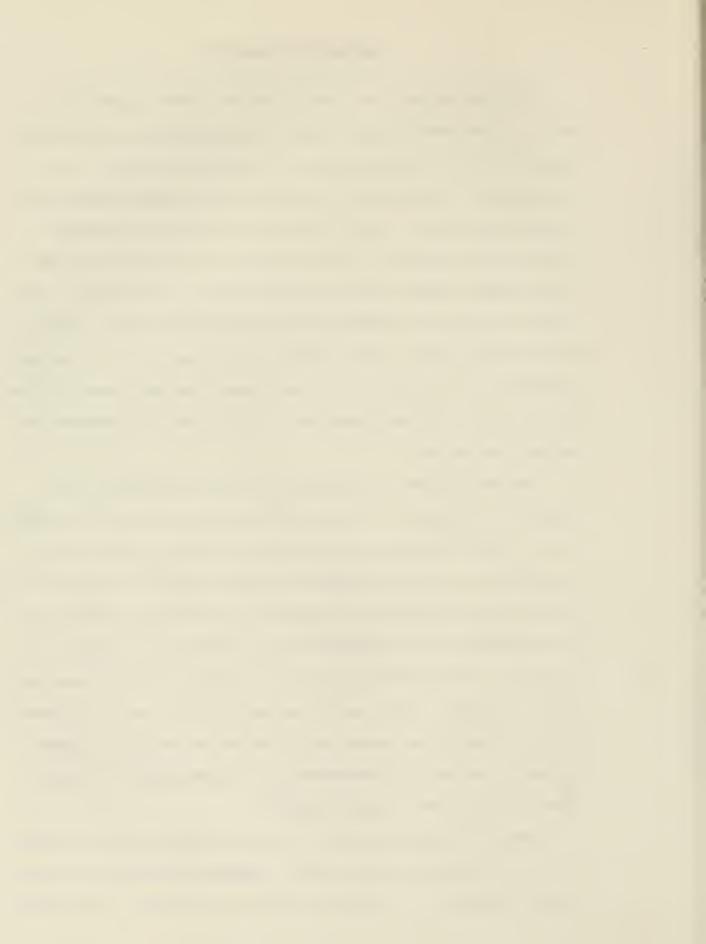


COMPARATIVE ANALYSIS

"As far as we know, there were no other greenhouses built in the same manner during the same period in Philadel-phia." 84 This is the opinion of Geraldine Duclow, a researcher who is currently studying early greenhouses in the Philadelphia area. "This one may be unique in Philadel-phia," she continued in an interview for this study. "We haven't seen others with projecting wings like this." Although there are a number of greenhouse structures known to have existed during this period, including those at Stenton, Woodlands, Bartram's Gardens and others, we may have to look outside this area for examples of this type of contruction during the period.

One well-known reconstruction may be studied as an example of the type of greenhouse construction seen at Lemon Hill. George Washington's greenhouse at Mt. Vernon, the original of which was completed around 1787, 85 is similar in form to the greenhouse at Lemon Hill, although in place of the hot-house wings, Washington had erected slave quarters (fig. 29). He apparently did not seriously begin plans for such a structure until after the Revolution, but "in those years of travelling about the colonies he could well have noticed examples of Greenhouses or 'Orangeries' - a name often used in describing them." 86

One building that he had seen and taken quite an interest in was the greenhouse of Mrs. Margaret Carroll in Mount Clare, Maryland. In August of 1784, Washington is recorded



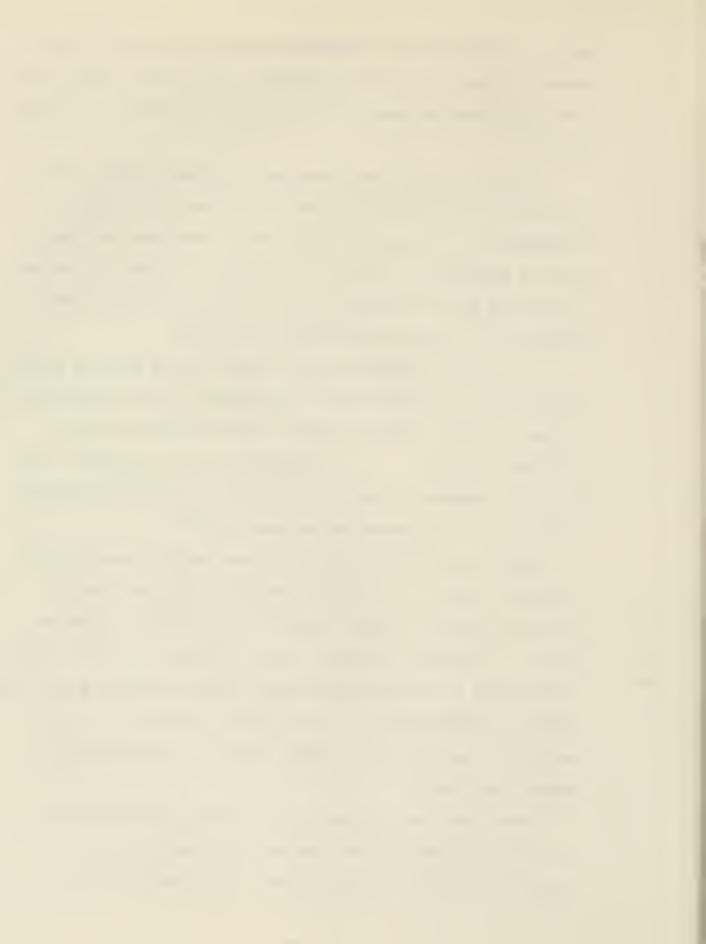
as inquiring as to the dimensions and proportions of every aspect of Mrs. Carroll's greenhouse. It is said that, upon receiving this information, Washington enlarged his original plan. 87

Because we know that Washington visited Robert Morris at The Hills on many occasions, we may be sure that the greenhouse at the country estate would have made an impression on Washington, although the degree to which this structure could have influenced the building of his own greenhouse must at this time remain speculation.

An original structure still extant which bears a strong resemblance to the Lemon Hill greenhouse is the Orangery (as it was called) at the Wye House on the Eastern Shore of Maryland (fig. 30). Its construction date is unknown, but there are references made to "several alterations and additions about the Greenhouse" around 1784.88

This greenhouse is of brick construction, mostly covered with stucco. It measures 85 feet long, the central portion flanked by lower wings. This familiar form is used in a different manner in the structure, the lower wings also having a solid roof and large windows between piers, in echoing the fenestration of the central portion of the structure, unlike the hot-house type of construction discussed previously.

There are four windows in the middle section (Lemon Hill had five registers), and each window is 12 feet 8 inches tall and is square-headed. The flanking windows



appear smaller and are round-headed. Flooring in the main portion consists of eight-inch square bricks, two inches thick and laid on a bed of sand. Behind the central room is a north shed room with an earth floor and fireplace (furnace), in the configuration noted in the greenhouse construction manuals of this period.

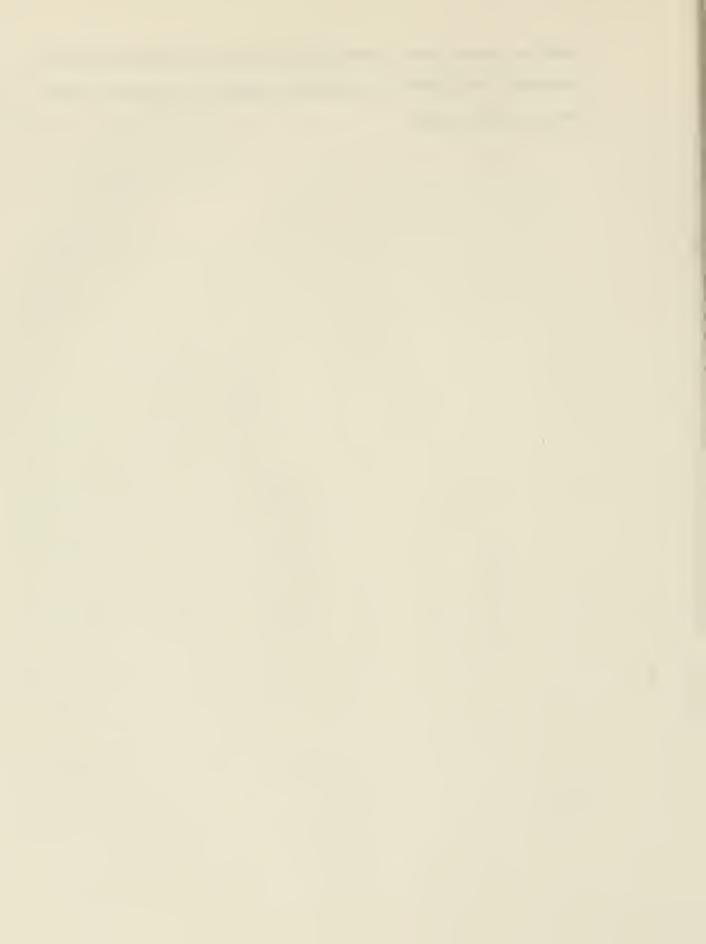
The furnace is built up of brick without mortar and is quite long, being 7 feet 6 inches in length and 16 inches wide. The inside height is 3 feet from the grate to the vault ceiling. The wall ducts are 10 inches wide and 17 inches high. The hot air rose up an incline at the rear of the sunken furnace, then passed along a floor duct in two sides of the building, and finally in wall benches in the remaining two sides. As the ducts extend out-ward from the furnace, they become larger in order to create suction for the hot air. The wall duct apparently rises from the floor four times to higher levels by means of ramps"

The upper room over the central section was reportedly used as a billiards room; the 18th century billiards table is now displayed at Wintertur Museum. The Wye Orangery was originally plastered upstairs and down; 92 this was quite typical, as we have seen.

This type of related existing evidence is very helpful in establishing parameters for stylistic and technological features possibly used at Lemon Hill. The Wye Orangery, in addition to yielding information on historic greenhouse construction, can give one, as well, a very good idea of



what to expect when conducting in-ground archaeological research, and aids in answering questions that may arise during such study.



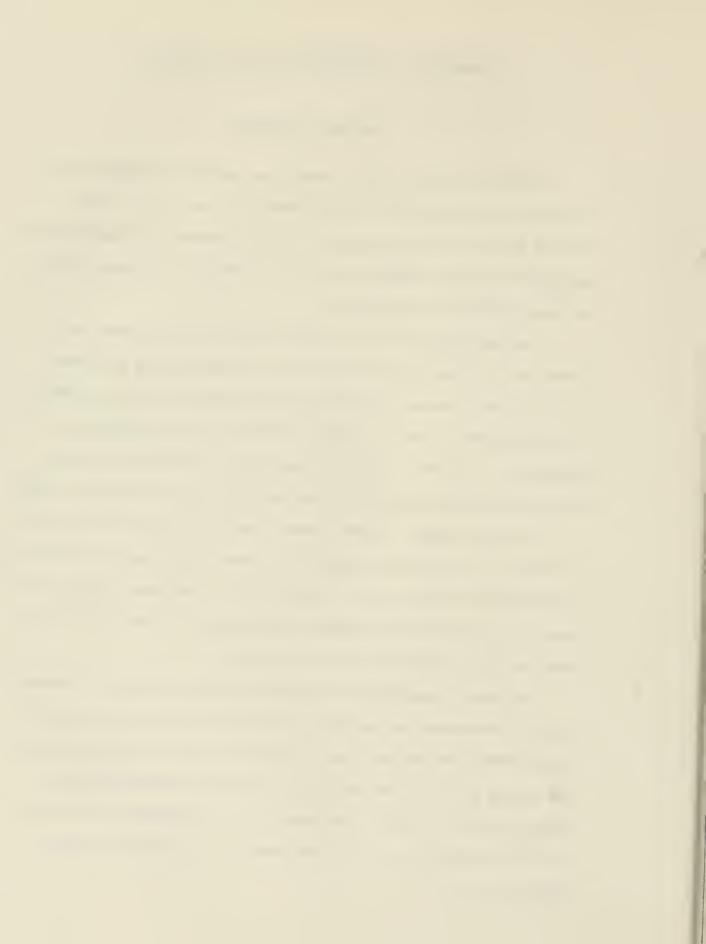
CHAPTER 3 - CONCLUSIONS and PROPOSALS

RESEARCH RESULTS

The intention of this study has been to compile information relative to the significance of the site called "Lemon Hill" and to provide a base of research from which to undertake further study that might lead to the possibility of restoration of the site.

The investigation into the history of the site has revealed its past associations with outstanding persons: William Penn, Robert Morris, George Washington, and others (see Chapters 1 and 2). The study has also shown that, beginning with Henry Pratt, Lemon Hill has had a direct influence on the people of Philadelphia (see Chapters 3 and 4). In the course of the investigation of the site's proprietors, it was discovered that Isaac Lloyd never owned the portion of the Lemon Hill estate which includes the mansion house and site of the greenhouse complex, a popular misconception which has been often repeated.

Personal examination of the business ledgers of Robert Morris uncovered references to "The Hills" which bring to light fresh historical data, including such information as the types of building and plant materials used and the prices paid for them, the names of the gardeners and suppliers of materials, and the dates of transactions (see Appendix C).



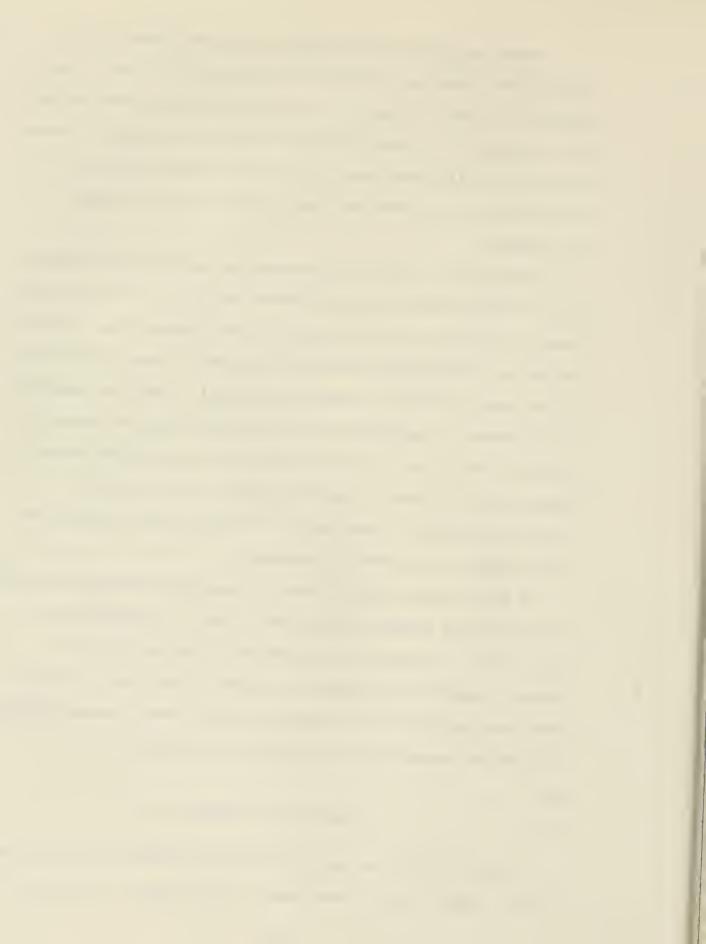
These facts were also used to synthesize additional information, such as the discovery of Morris's use of coal, rather than wood, furnaces at the greenhouse as ascertained from the amount of coal delivered there; or the approximate dates of building and alteration of the complex as manifested in notations on construction-related activity found in the ledgers.

The study of visual documentation and written descriptions of the grounds and greenhouse complex gives us a more complete picture of its evolution (see Chapters 2, 3 and 5), including dimensions and materials as well as such features as the vault under the greenhouse itself. The knowledge of the existence of a possible vault and the type of construction used would be of great value to any in-ground research. Comparison of historic maps with each other and with present-day maps is invaluable in deducing the location of the greenhouse on today's landscape.

A more complete knowledge of greenhouse construction of the period was gained through the study of contemporary (historical) writings on the subject (Chapter 6), and through comparative analysis of other greenhouses of the same type which are still extant or have been reconstructed in historic preservation projects (see Chapter 7).

Archaeological Study.

The documentation and information gathered and analyzed in this study, as mentioned above, would make an archaeolo-



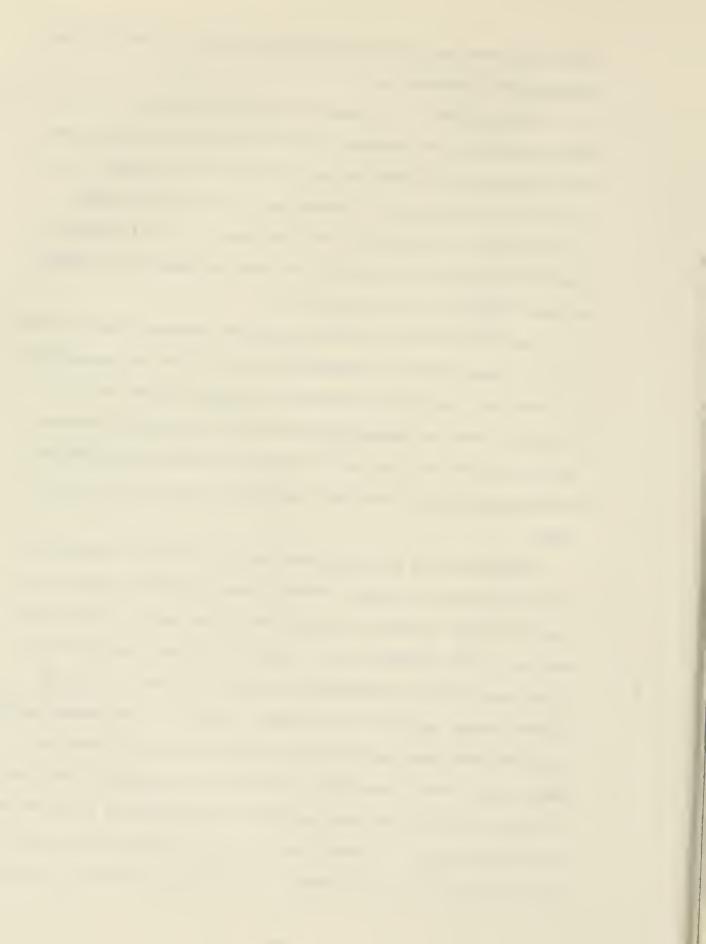
gical dig for the greenhouse at Lemon Hill a feasible and informative undertaking.

"Archaeology is a means of studying the past, but it takes place in the present, and so reflects the attitudes and aspirations of the society of which it is part." The purpose of this study, in addition to illuminating the significance of Lemon Hill for the people of Philadelphia, has been to provide a context for the archaeolgical study which, hopefully, will follow it.

The documentation and information gathered and analyzed in this study make an archaeological dig for the greenhouse at Lemon Hill eminently feasible. Archaeology's role is generally that of identifying sites, locating structures, and recovering artifacts, 2 thereby increasing the general knowledge of a site and the changes through which it has gone.

Above-ground and in-ground archaeological studies of the site should be made. Above-ground archaeological surveys are less costly, yet they can often reveal some information to the trained eye. Certain existing landforms or plantings of trees and shrubs can be tell-tale signs of former roads, paths or structures. Level or depressed areas may indicate previous building, especially when used in conjunction with historical information regarding the site.

Aerial photography may reveal some surprising evidence of disturbed earth. A recent aerial shot of Lemon Hill, which was sought out for this study, shows very clearly a pattern



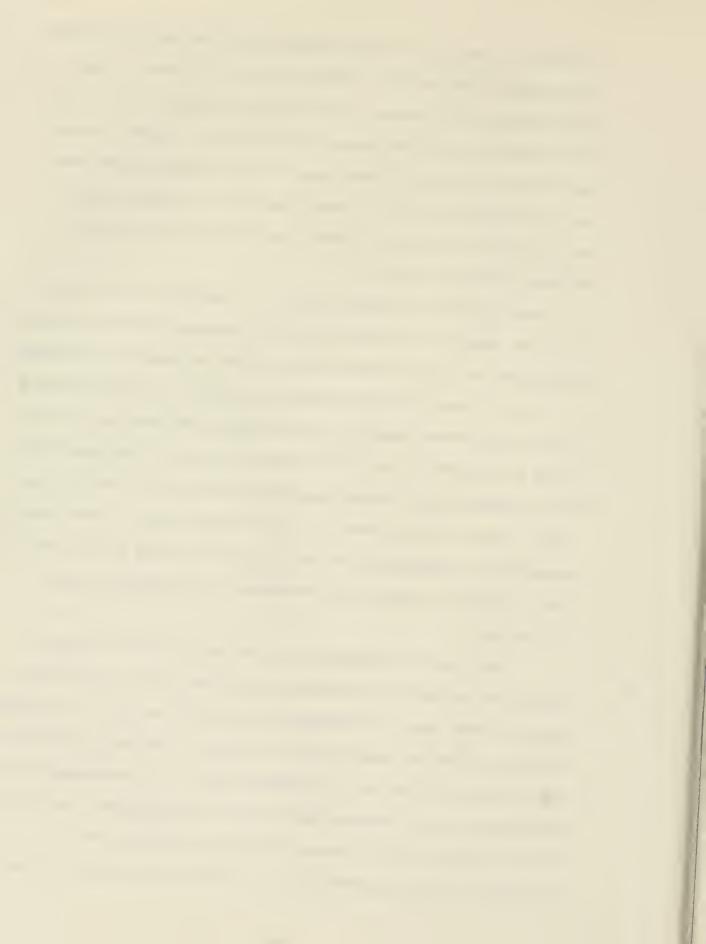
of walks on the site of the terraced gardens which follows the design found on 19th century maps of Fairmount Park.

Unfortunately, the music pavilion was erected on this site around 1876, and subsequently burned down in 1936. Paths now seen in the aerial photograph could therefore be remnants of possibly a more recent attempt at garden restoration by John Kistler, L.Arch., around the time of the National Bicentennial.3

Even a simple walking survey of the Lemon Hill site revealed shards of flower pots and numerous pieces of flat, thin glass at the probable site of the hot-house structures.

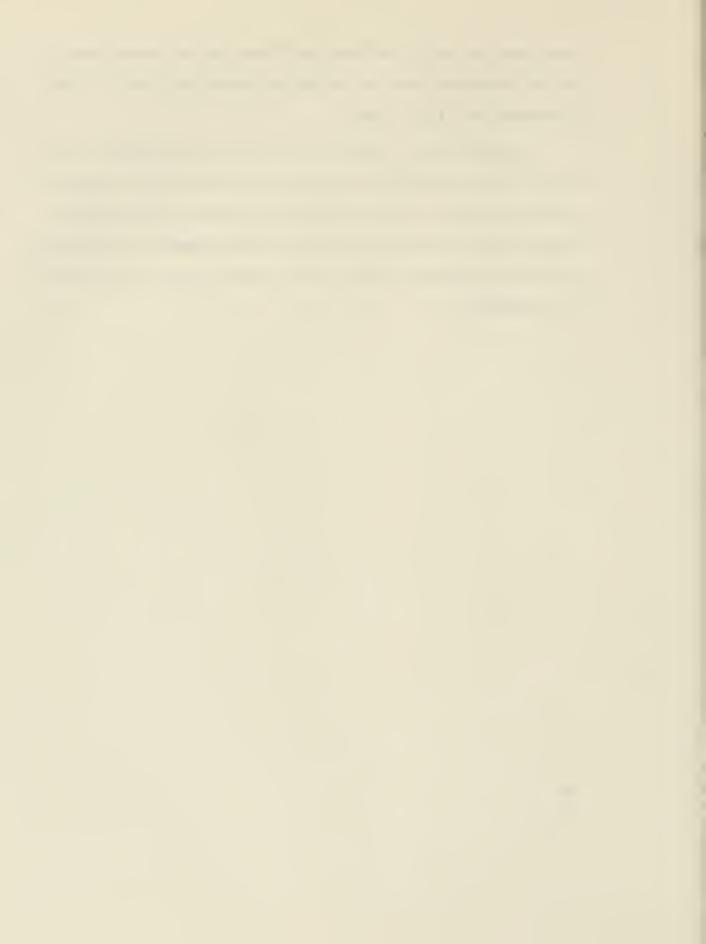
An in-ground archaeological survey in this area should yield fascinating results. The foundations and part of the paved floors and flue system should exist in the substrata. The furnaces should have been built below the level of the floor, and therefore possibly may remain intact. The "vault beneath the greenhouse" may be revealed, along with a multitude of clay pot and glass fragments, and possibly other artifacts.

In the garden, a succession of walks will be found, except in the area of the Music Pavilion, which would present its own story of subsequent uses of the site. A number of tests could be conducted on soil core samples to indicate locations and types of plantings. Tests for phosphate concentration and ph values may be used to determine the location of those planting areas which were fertilized and cultivated. Stratigraphy and soil color variations of the



core samples would indicate cultivation or disturbance, while concentrations and types of seeds can lead to the discovery of plant types.⁴

Archaeological study of the site of Lemon Hill could prove to be a rewarding and exciting challenge, one which should be done. The information gathered and attention drawn to the site would be good advertisement for the project, for Fairmount Park, and ultimately for the City of Philadelphia.



Rural scenery is so congenial to the human mind, that there are few persons who do not indulge the hope of retiring at some period into the country. Its peculiar and gentle pleasures are suited to all ages and every rank of life, and afford not less gratification to the general observer, than to the philosopher, the poet, or the painter.

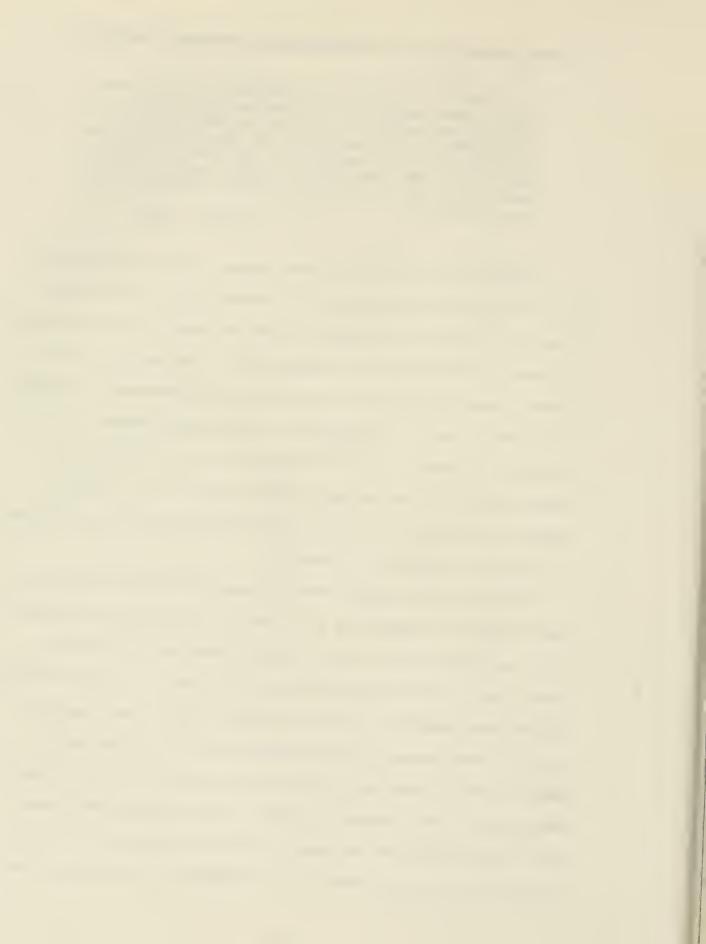
- J.C. Loudon, 1806.

The quality of country experience, the motivation behind the initial development of country seats along the Schuylkill River, was deeply rooted in the firm horticultural base of 18th century Philadelphia. "The siting of the 'greene Country Towne' and the early relationship of garden and 'country' were a background to the development of the landscape gardens along the Schuylkill. The substantial economic base of the second largest city in the English-speaking world made possible the wealth behind the creation of the great country estates."

The wealth of Robert Morris created The Hills with its fine orangery, enjoyed by his family and friends, including visiting dignitaries such as George Washington himself.

Under Pratt's hand the site was developed into a magnificent garden spot complete with a majestic greenhouse complex.

The site was renowned in Philadelphia, the nation and beyond. Pratt graciously allowed visitors to view it, and according to one author in 1932, "some of those who came went home determined to make beautiful their own surroundings; thus to this garden by the Schuylkill was given credit



for improving many other gardens, both large and small."

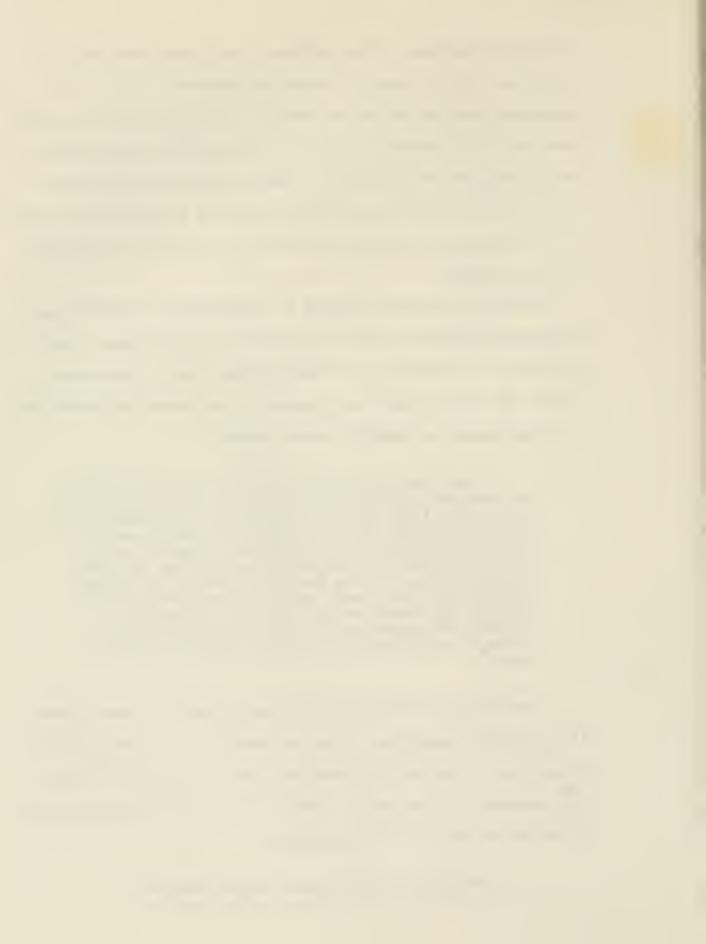
The fire of this passion toward enrichment of one's surroundings was fueled by the wealth of plant materials made
available by gardeners who sold plants out of the garden
and greenhouse at Lemon Hill, and those who, upon honing
their skills of the trade while employed at Lemon Hill, went
on to establish their own successful nurseries in response
to this demand.

Pratt's generosity began an association of public access and admittance which the populace has enjoyed since that time as Lemon Hill became the nucleus of Fairmount Park. The park itself is a marvel, the wonder of which has been expressed in the following manner:

How was it possible for mile on mile of the elevated land in the heart of a great city to be preserved from the encroachments of business and factories? How did it come about that some of the most remarkable water-front property in all the world was brought together for the enjoyment of garden-lovers who have no gardens; of those who delight in trees, yet live in cramped quarters where there are no trees; of those who rejoice in boundless sweeps of green grass but have no more than a few square yards of their own?

The appreciation of a park was thought by many, from its earliest inception, to be a commodity which would have a beneficial effect on Philadelphia, not merely healthfully, but economically as well. One writer in 1856 expressed his optimism in the following passage:

The obtaining of such broad areas of ground, will, we believe, be the dawning of a



new era upon our city; we will feel its immediate pecuniary benefit in the greater influx of strangers, and in the increased advantages thus given to it as a place of permanent residence; and this advantage to the city and to its artisans will be obtained without diminution, but with an increase rather of its revenue, for the opening of pleasure-grounds will lead to improvements, from which there will be received back again into the city coffers an increased revenue.

Today, we have not only the park to enjoy, but also the so-called "Park Houses," those mansions that serve as reminders of the estates which together form Fairmount Park.

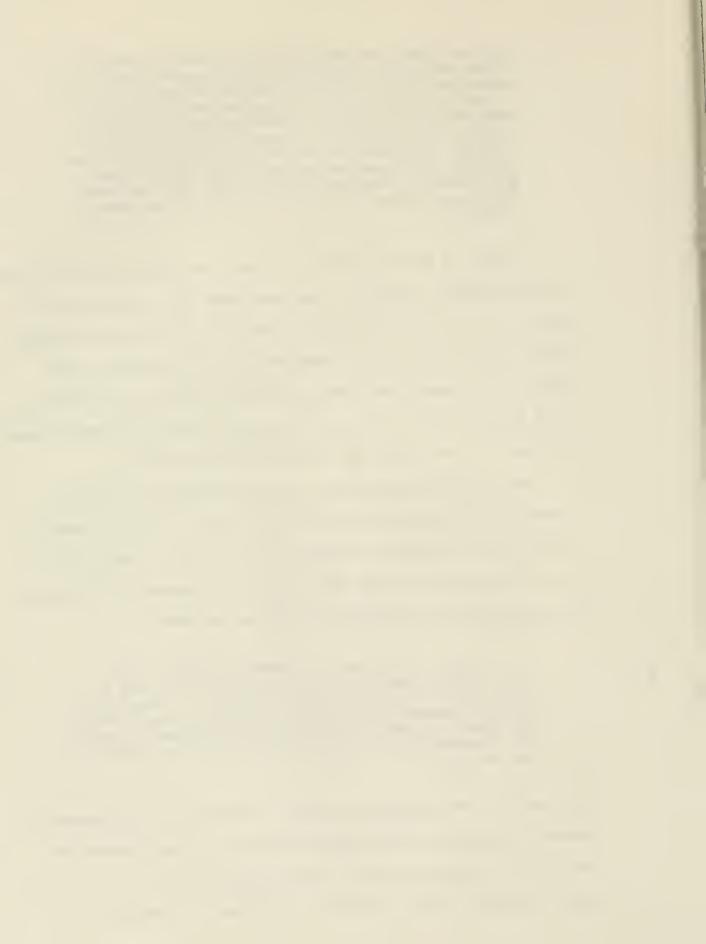
"These fine old Colonial mansions have fortunately been preserved through their acquisition by the City for Fairmount Park. A visit to one of them will make one understand the lure of the place for the old worthies."

10

Yet the full potential of this treasure of historic structures is not being realized; in fact, it is in danger of being lost to fire, vandalism and neglect. Why should this be the case? Peter Odell of the Fairmount Park Commission expressed the following opinion in 1986:

There are a lot of places around in the South and in New England that beat the band like crazy about their historic mansions. Nobody's got the number of buildings that we have. We've got the trolleys and the tour operating already, so it seems to me we've got to build on what we've got.11

Mrs. E. Norton Hunt, current president of the Colonial Dames of America, Philadelphia Chapter II, who occupy the Lemon Hill Mansion as their headquarters, is of the opinion that Fairmount Park could be a goldmine in tourism. The



problem, as she expressed it during an interview for this study, is that "we never blow our own horn." 12

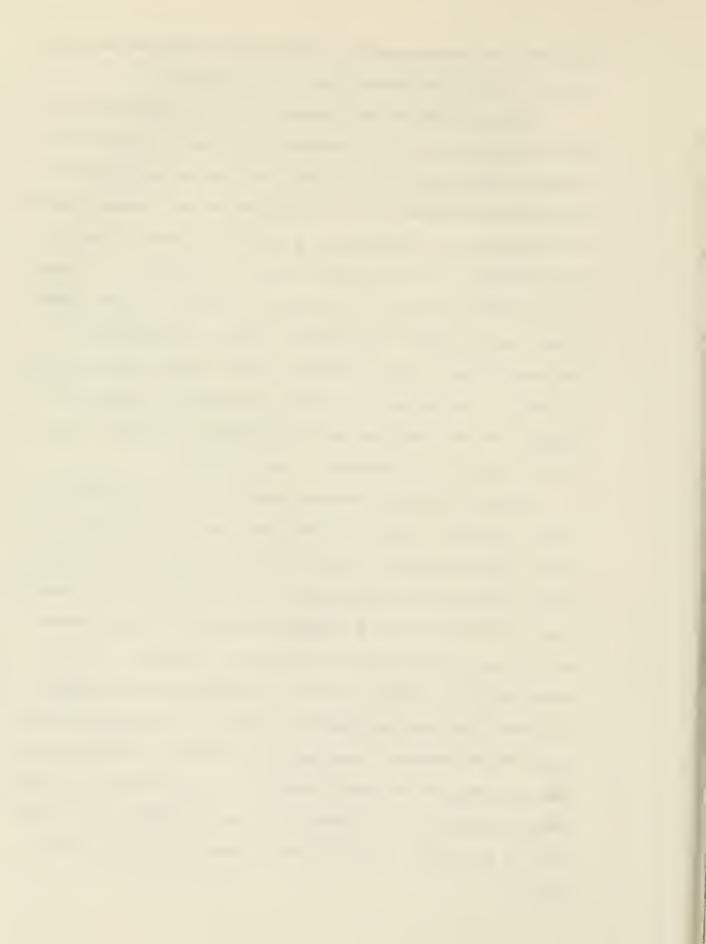
Tourism seems to be foremost in most peoples' minds when the question of how to handle the park houses is discussed. The curator of American Decorative Arts at the Philadelphia Museum of Art, Beatrice Garvan, states that "If the houses were conceived as a unit with other sites in Philadelphia - not as 'those houses in the park' - I think it could make, easily, a three-day visit." Those other sites could include, according to Odell, Independence

National Historic Park, Memorial Hall "where there would be an exhibit on the nation's 1876 Centennial," the park's Japanese House, and Fairmount Waterworks, 14 which is currently undergoing restoration as a museum.

The park houses, however, cannot all be supported as "house museums," and alternate uses must be discussed.

Odell feels that the future for these historic structures lies in finding private groups to use and maintain them. 15

Some of the currently discussed options for these houses include using The Cliffs (1754) as a residence, turning Greenland (1825) into a bed and breakfast establishment, utilizing the Rockland Mansion (1810) as the American Historic Rowing Museum, leasing Belmont Mansion (1742) to the American Women's Heritage Society, and renovating the John Boelson Cottage (the oldest in Fairmount Park) to be operated as a tourist center by the Friends of Philadelphia Parks. 16



These ideas certainly have a great deal of potential, both as lifesavers for the buildings and for promoting tourism and public interest in the homes and the park. The problem, however, is money, or rather, the lack thereof. "Odell has long argued that the city - not some foundation or corporation - has to take the lead in preserving the park mansions."17 His position is corroborated by that of his colleague John McIlhenny, who is quoted as saying of the park houses, "They are national treasures. And there's no excuse for the city not taking care of them. The primary responsibility of the city [should be] to preserve these buildings for future generations. That's the absolute minimum."18 However, the present mayor of Philadelphia, Wilson Goode, feels that there are other needs, such as public housing, that have priority in the city's budget. He recently stated that the city government should not be expected to pay any more than 25% of the cost of the restoration of the houses. 19

Currently the Fairmount Park System, which includes 8700 acres and constitutes 10% of the city's land, receives 0.7% of the city's operating budget, or \$12,000,000 per year. To give some point of reference, the Police Department receives 14.5% of the budget or \$246 million dollars, over 20 times as much as the park. While it is not being suggested that there are too many policemen or that the park is as necessay as the peace-keepers, it would seem that the park system could be allotted a larger piece of the budget.



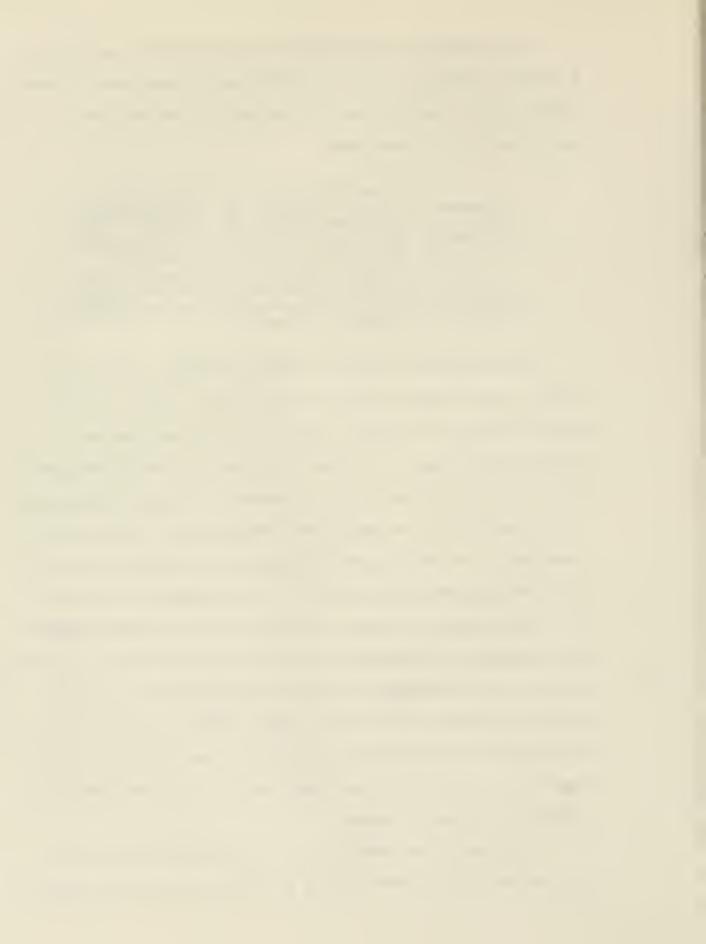
Any additional funding for the restoration and refurbishing of the park and its houses would reap benefits many times over to the City of Philadelphia. The following quotation illustrates this:

... in adding the opportunity for the enjoyment of a park so beautiful and expansive to the many other advantages of residence within its limits, people are, and will be, attracted to us from other sections of the country.

... the general business interests of the city will be largely promoted in the reputation which this attractive feature will give to Philadelphia throughout the land.²¹

These thoughts are from Thomas Cochran, writing in 1872. Surely they hold true for us, too. With today's health-conscious trends, a park of this size, correctly maintained and marketed, would increase the perceived quality of life in Philadelphia, a commodity that carries quite a bit of weight for corporations seeking a new locale. The idea that a major city on the Northeast Corridor has an enormous and beautiful park for the enjoyment of its citizens for jogging, biking, skating, or other outdoor sports, and possesses the wealth of nearby housing which is the case here, makes Philadelphia an ideal candidate for a renaissance few other cities could equal. "What we need to do is recognize our assets and boast about them a little. Unfortunately, I think it's as simple as that." 22 Mr. Odell's remarks have merit indeed.

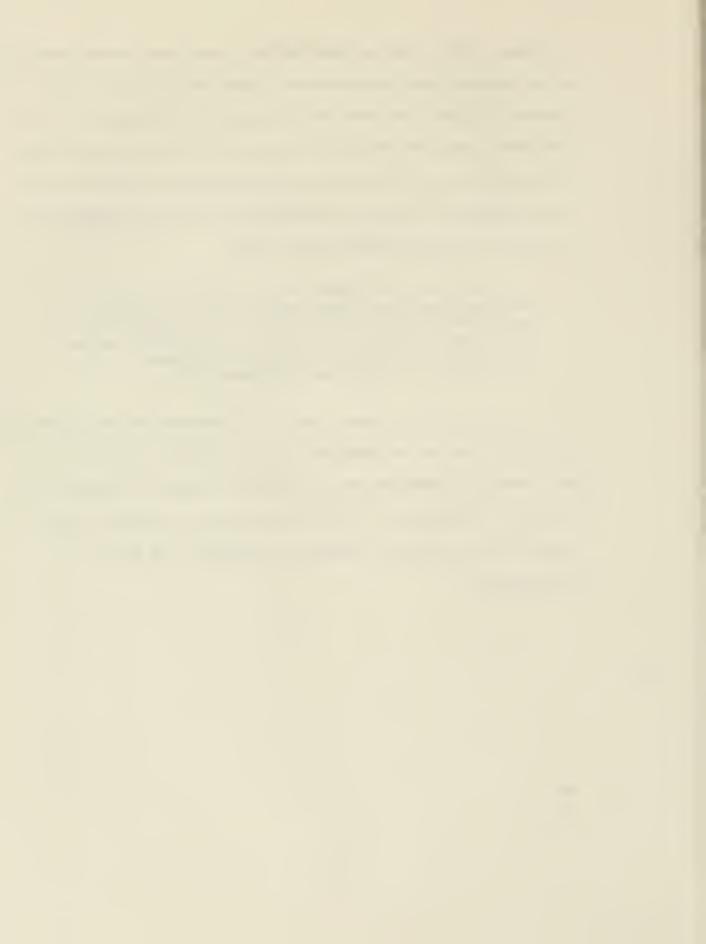
Why should not Lemon Hill, once again, serve as the beginning of a movement, much as it did in the early days of



Fairmount Park? The archaeological study and reconstruction of the gardens and greenhouse at Lemon Hill could be the flagship project for the revitalization of the park. Its prominent position above the Museum of Art and overlooking the Schuylkill and the City of Philadelphia would act as a highly visible incentive towards the future development of the city. As stated many years ago:

Give us but Lemon Hill to begin with, as a nucleus, and the local pride of our citizens will be aroused, their public spirit and liberality will at once be shown in contributions for its extension, and the city will possess a public park ... of unrivalled beauty.²³

It is sincerely hoped that the information presented in this study may be of service in the attempt to revitalize the erstwhile beauties and pleasures offered by Lemon Hill and may be a small but initial step upon the path to the former glories of that historic landscape and pride of Philadelphia.



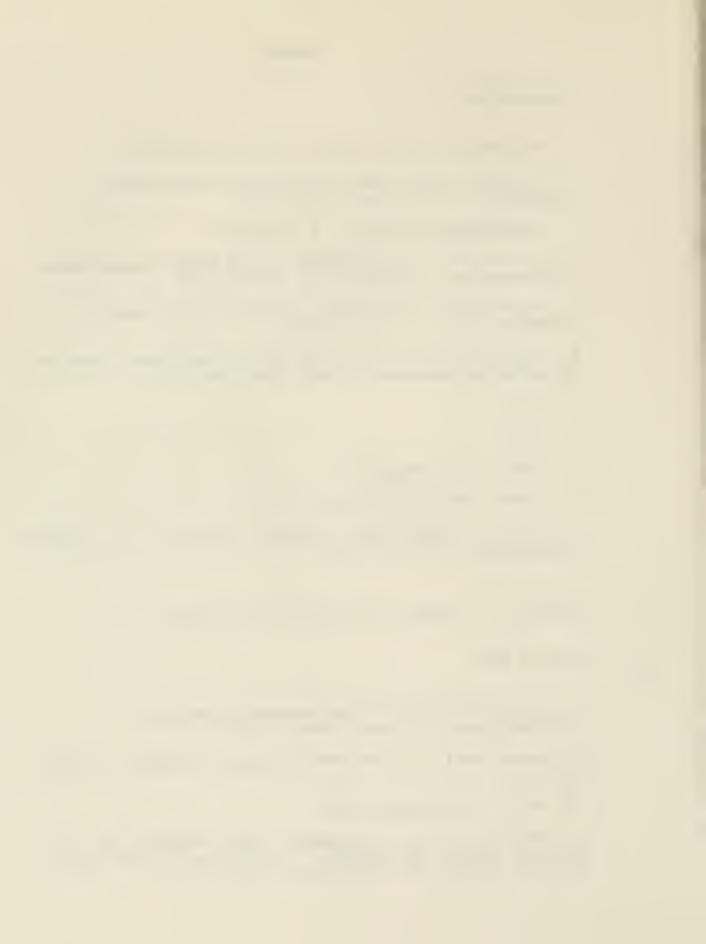
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- CHAPTER 1 HISTORY OF THE SITE and GROUNDS

WILLIAM PENN

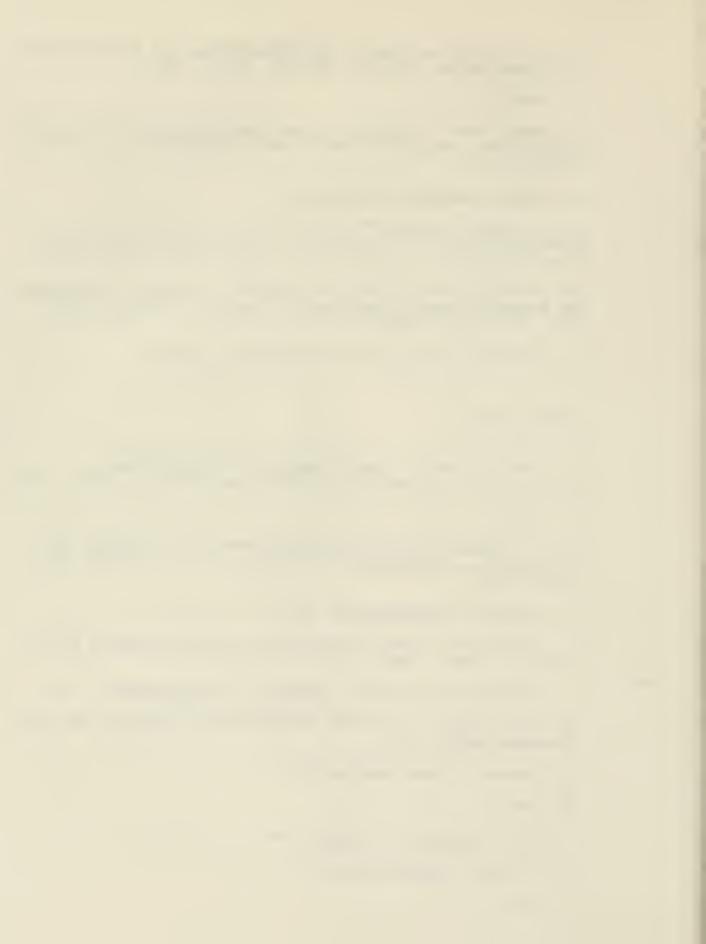
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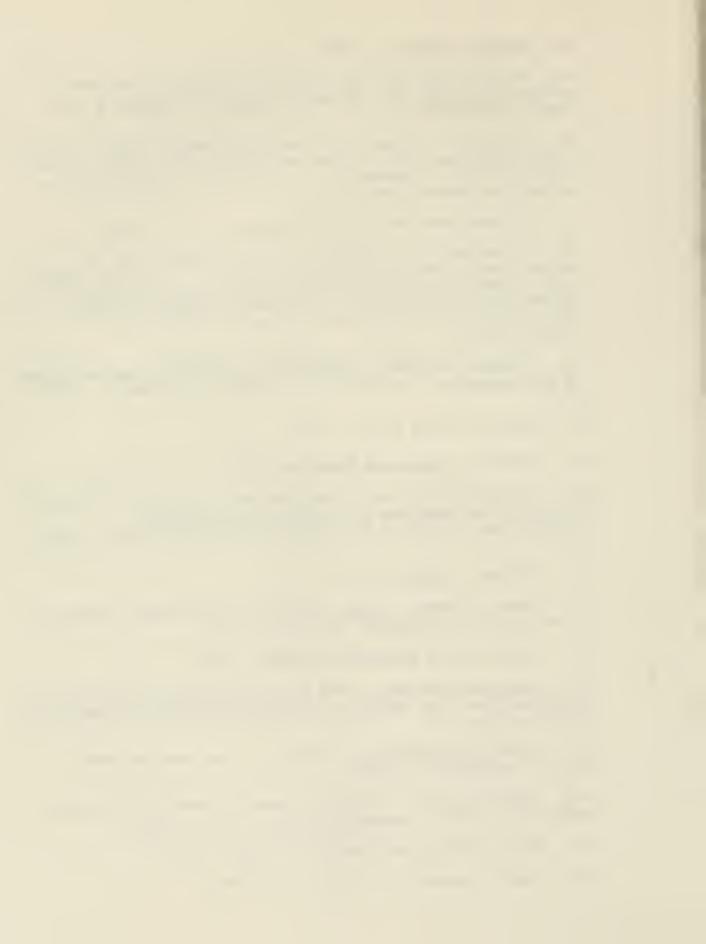
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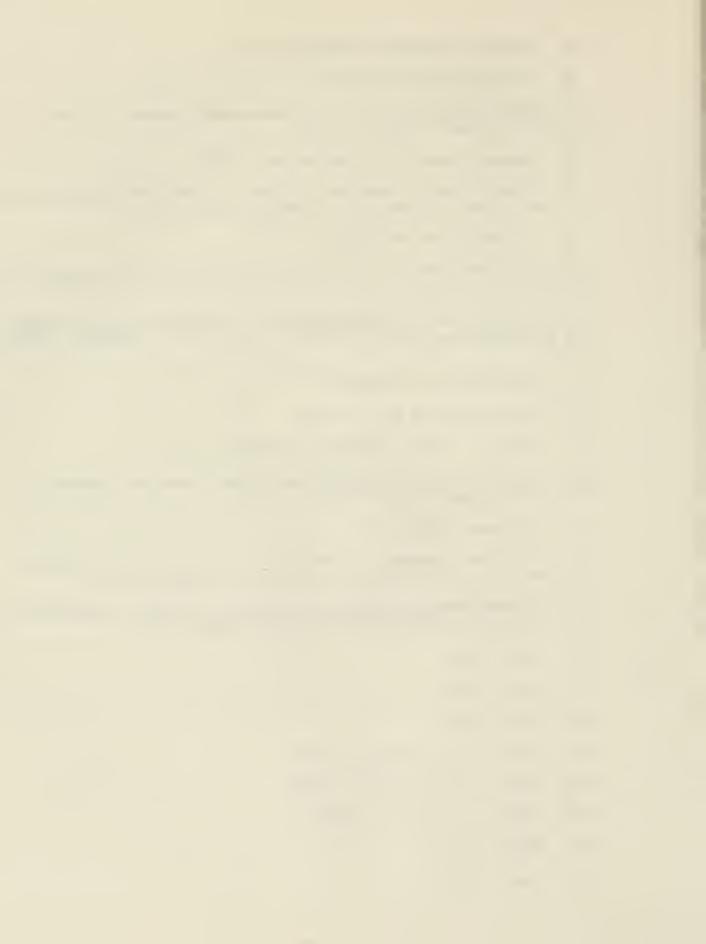
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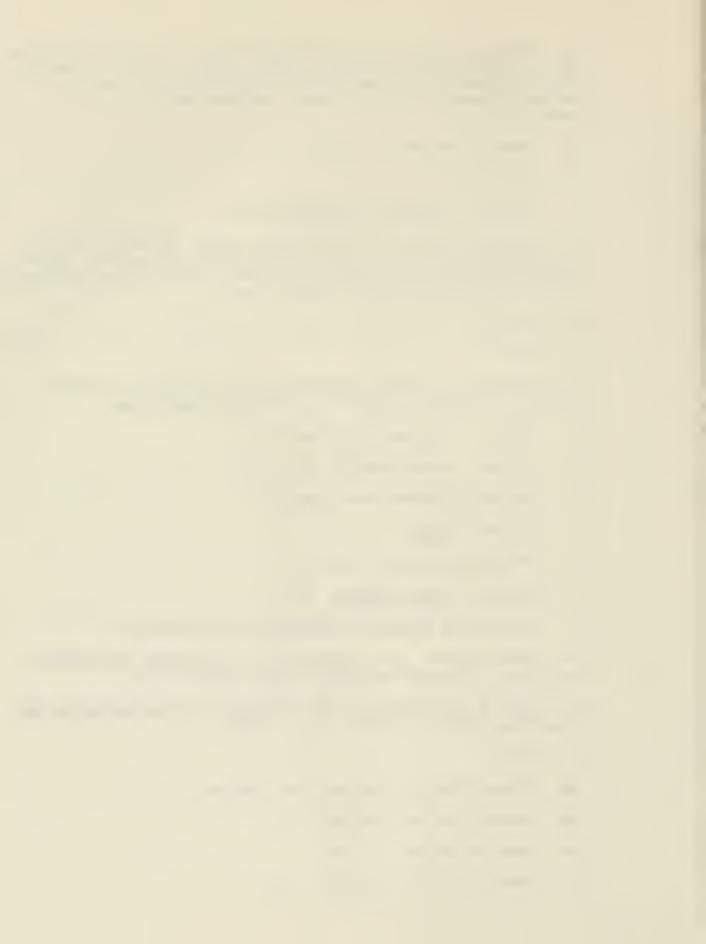
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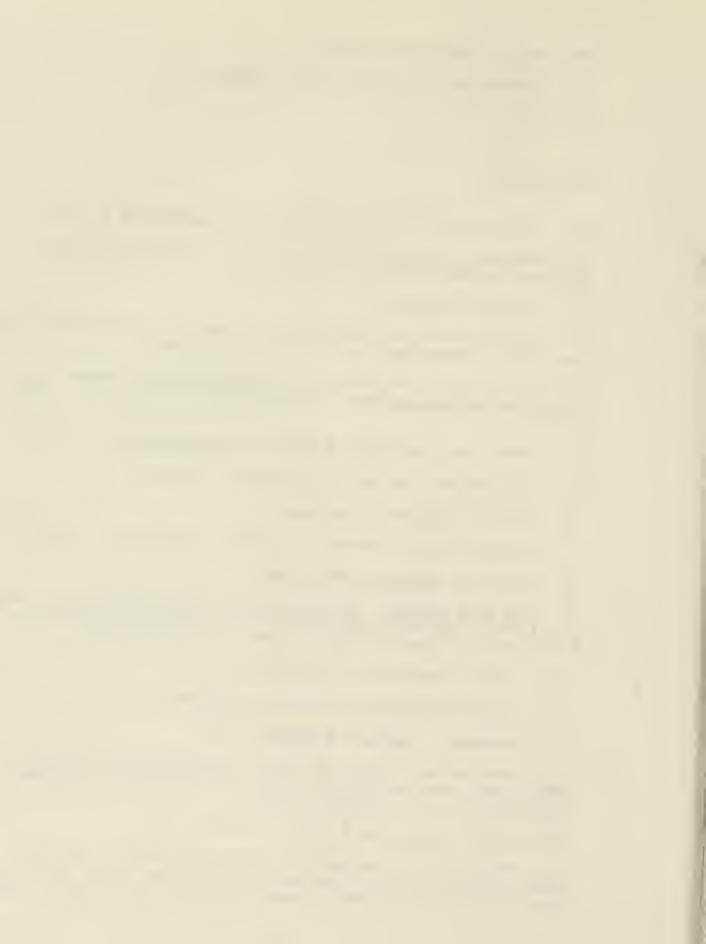
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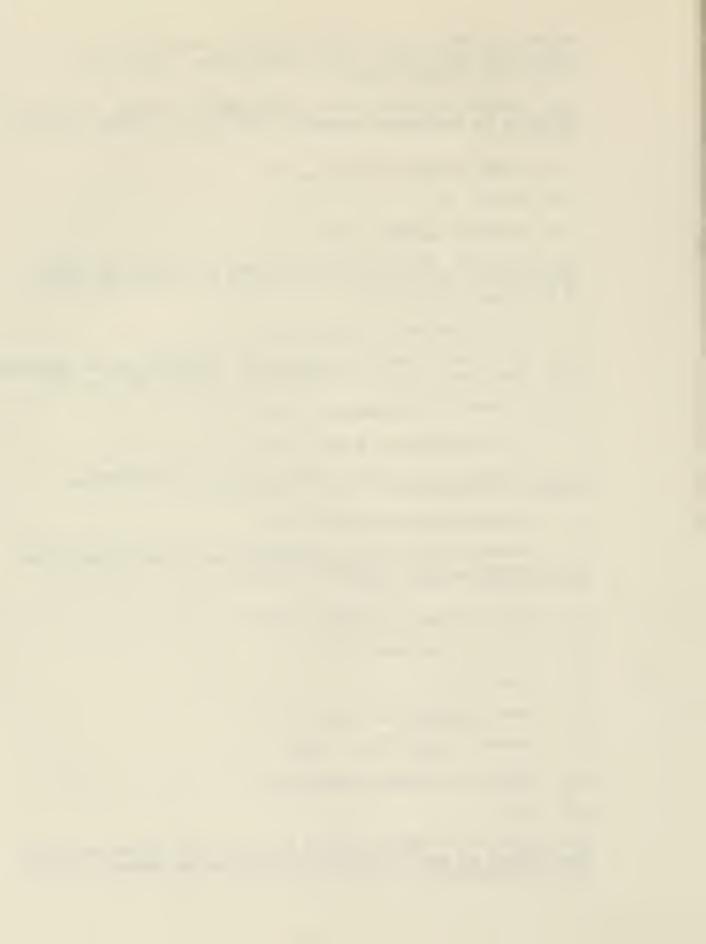
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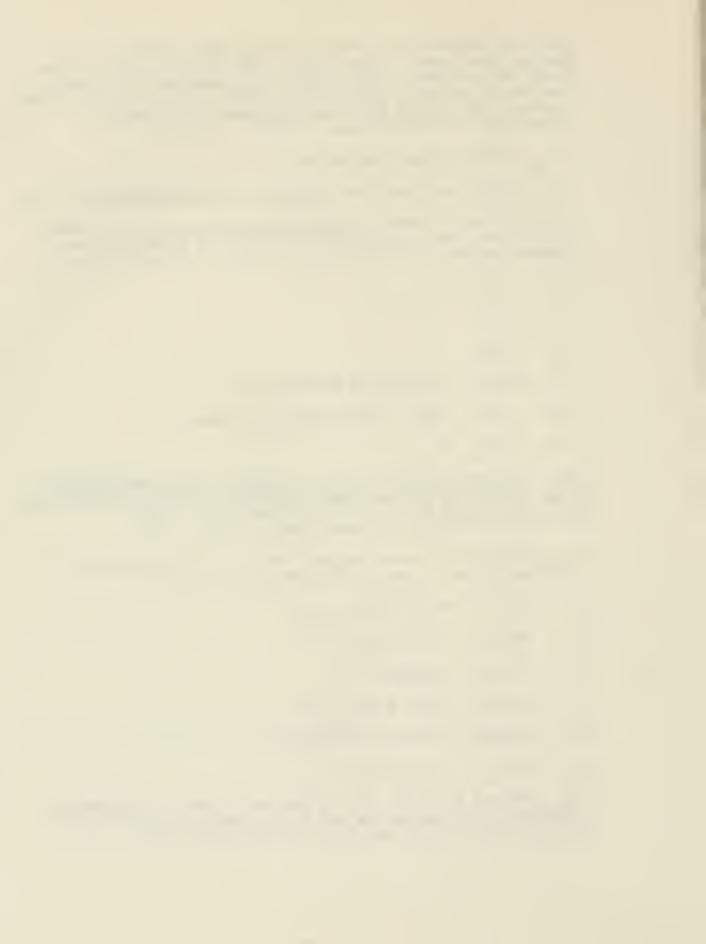


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- 142. Keyser, Lemon Hill, 5.
- 143. Sketch of Fairmount, 5, 6.
- 144. Keyser, Lemon Hill, 22.
- 145. Thomas Cochran, <u>Fairmount Park: A Necessity for the Health and Recreation of the Present and Future Population of the City</u> (Philadelphia: N.p., 1872), 49.
- 146. Sketch of Fairmount, i.
- 147. Ibid., 17.
- 148. Ibid., 9.
- 149. Faris, <u>Old Gardens</u>, 297.

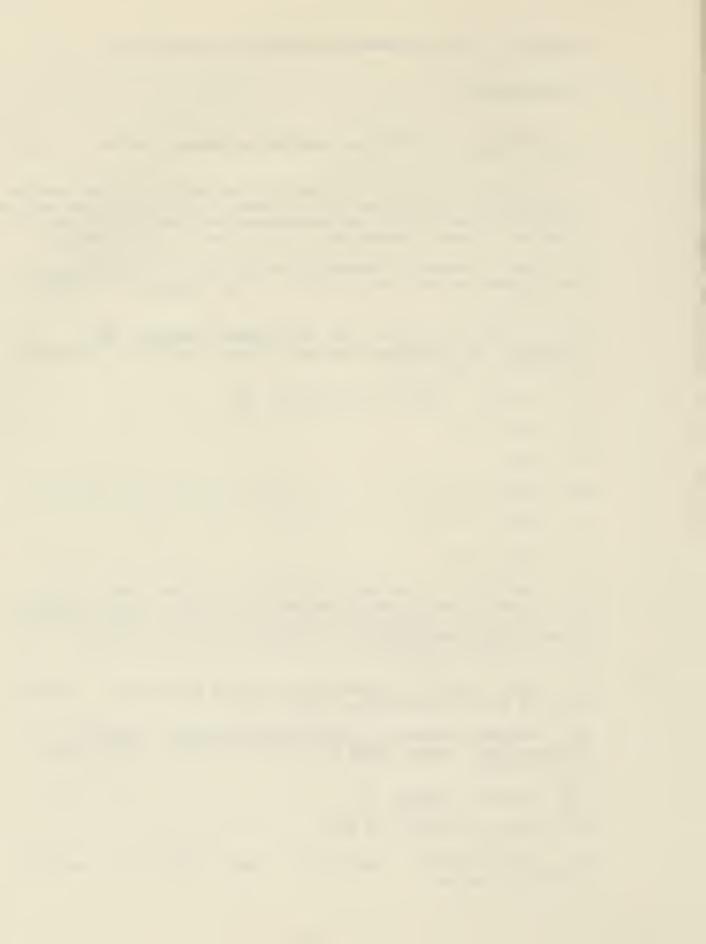


- 150. For further information on the Park Movement and Central Park see: Albert Fein, "The American City: The Ideal and the Real," The Rise of an American Architecture (New York: Praeger Publishers, 1970); also Frederick Law Olmsted, Sr., Forty Years of Landscape Architecture (Cambridge: The MIT Press, 1973).
- 151. P.M.A., Three Centuries, 187.
- 152. Scharf and Westcott, History of Philadelphia 1, 725.
- 153. Sidney & Adams, <u>Description of Plan</u>, 3. The design ideas given are very similar to those of Frederick Law Olmsted as he laid out Central Park in New York City.
- 154. Ibid., 4.
- 155. Ibid.
- 156. Ibid.
- 157. Meehan, Gardener's Monthly, 58.
- 158. Sidney & Adams, Description of Plan, 7.
- 159. Ibid., 15.
- 160. [Sidney George Fisher], A Philadelphia Perspective: Diary of Sidney George Fisher Covering the Years 1834-1871, ed. Nicholas B. Wainwright (Philadelphia: The Historical Society of Pennsylvania, 1967), 408-9.
- 161. Lemon Hill Association, "The Story of Lemon Hill" ([Philadelphia]: Lemon Hill Association, 1911).
- 162. Ibid., Introduction, n.p.
- 163. Smart, "In Our Town," 4.
- 164. Rivinus, Lights, 15.
- 165. Naude, "Lemon Hill," 508.
- 166. Barnes, "Colonial Dames," 8.
- 167. Smart, "In Our Town," 4.
- 168. Edward Straham, ed., <u>A Century After: Picturesque Glimpses of Philadelphia and Pennsylvania</u> (Philadelphia: Allen, Lane & Scott and J. W. Lauderbach, 1875), 24.

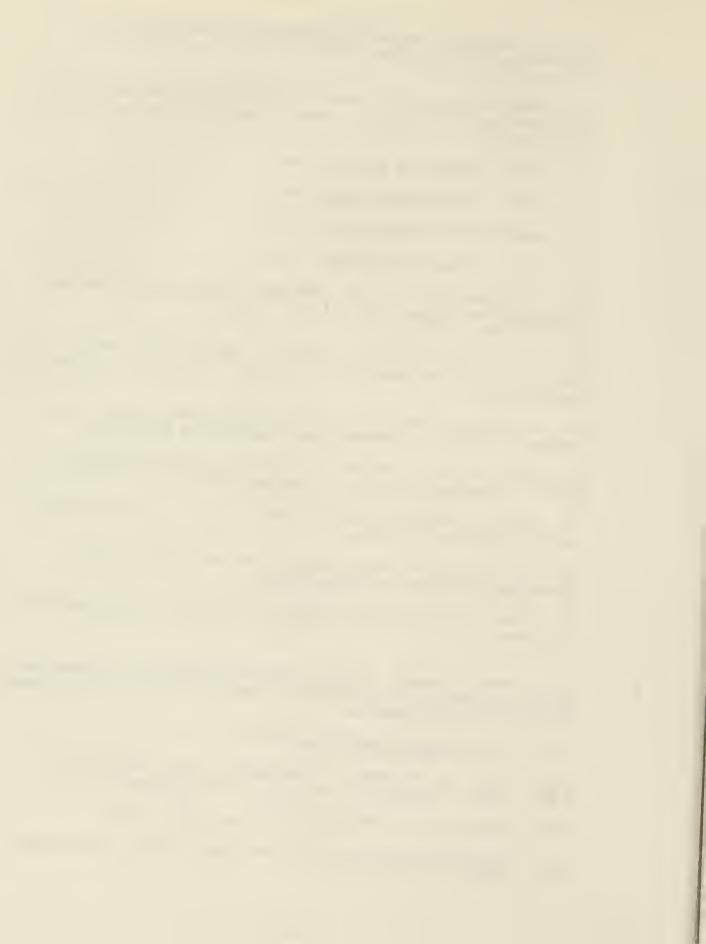


DOCUMENTATION

- 1. Agnes Catlow, <u>Popular Greenhouse</u> <u>Botany</u> (London: Lovell Reeve, 1857), 2.
- 2. Dr. David De Long, Chairman of the Historic Preservation Department at the University of Pennsylvania sometimes refers to historic preservation as "management of change," but more often as "change responsive to the historic environment."
- 3. John J. Stewart, "Debating Scrape versus Anti-scrape in the Gardens at Belleview Terrace," <u>APT Bulletin</u> 18, nos. 1 & 2 (1986), 43.
- 4. H. Chandlee Forman, <u>Old Buildings</u>, <u>Gardens</u>, <u>and</u>
 <u>Furniture in Tidewater Maryland</u> (Cambridge, MD.: Tidewater Publisher, 1967), 51.
- 5. Stewart, "Belleview Terrace," 43.
- 6. Ibid., 44.
- 7. Ibid.
- 8. Ibid.
- 9. Ibid.
- 10. Ibid., 46.
- 11. Joel Fry, interview with author, 16 Jan. 1987. Fry is currently enrolled in the Ph.D. program in archaeology at the University of Pennsylvania and has been working on the excavation of the gardens and greenhouse at Bartram's Gardens, Philadelphia.
- 12. Edgar Anderson, <u>Plants, Man & Life</u> (Berkeley: University of California Press, 1952), 3-5.
- 13. Martin P. Snyder, <u>City of Independence: Views of Philadelphia before 1800</u> (New York: Praeger Publishers, 1975), 186.
- 14. Rivinus, Lights, 12.
- 15. "Morris Ledger C," 105.
- 16. John Woodside, "Lemon Hill," 1807. Historical Society of Pennsylvania.

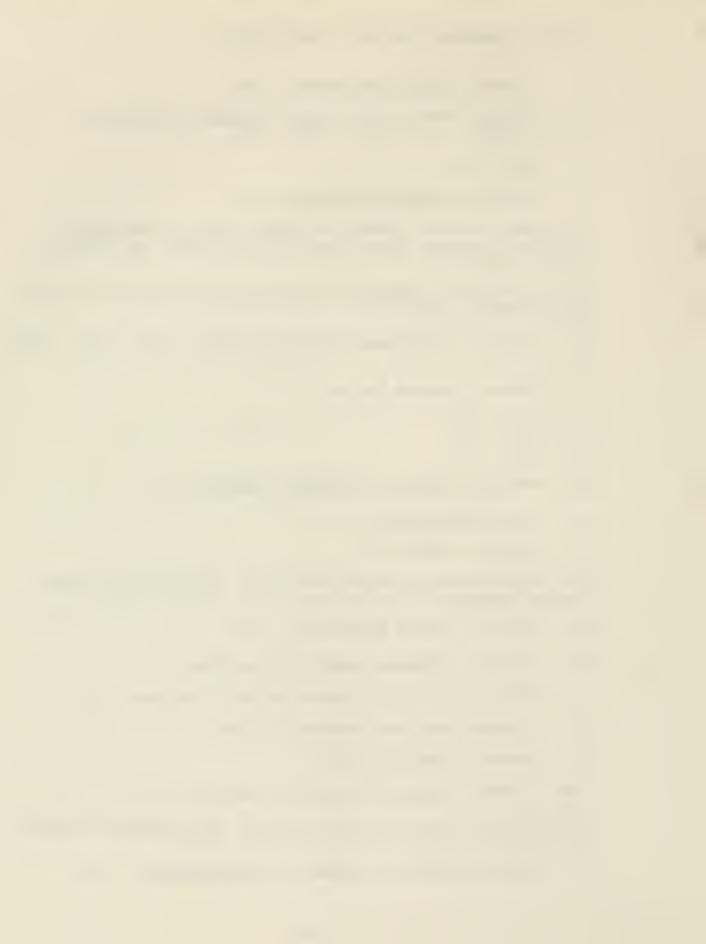


- 17. R. Campbell, "View of the Dam and Water Works at Fairmount, Philadelphia," 1924. Free Library of Philadelphia.
- 18. George Lehman, "Fairmount Waterworks from the Basin," published by C. G. Childs, 1829. Historical Society of Pennsylvania.
- 19. Boyd, <u>History of P.H.S.</u>, 424.
- 20. P.M.A., Three Centuries, 257.
- 21. Wainwright, Romantic Age, 95.
- 22. P.M.A., Three Centuries, 186.
- 23. Ellouise Baker Larsen, <u>American Historical Views on Staffordshire China</u>, 3rd edition (New York: Dover Publications, 1975), 115.
- 24. P. C. Varle, "Plan of the City and its Environs," (Philadelphia: Bradley & Co., 1796). Historical Society of Pennsylvania.
- 25. R. Howell, [Map of Philadelphia], 1799, copied by R. Campbell, 1827. Fairmount Park Commission Archives.
- 26. William Allen, "Plan of the City of Philadelphia," 1828. Historical Society of Pennsylvania.
- 27. "Plan of the Fairmount Docks," N.p., n.d. Fairmount Park Commission Archives.
- 28. Charles Ellet, Jr., "Map of Philadelphia," 1843. Historical Society of Pennsylvania.
- 29. [Map of Fairmount], c.1851?, Fairmount Park Commission Archives.
- 30. Sidney & Adams, "Plan of Fairmount-Park by Sidney and Adams, Adopted by City Councils March 3rd 1859," Historical Society of Pennsylvania.
- 31. P.M.A., Three Centuries, 144.
- 32. Worley and Bracher, "Topographic Map of Fairmount Park," 1870. Historical Society of Pennsylvania.
- 33. Hopkins & Co., "Atlas of Philadelphia," 1872.
- 34. "Topographic Map of Fairmount Park," 1917. Fairmount Park Commission Archives.



PERIOD GREENHOUSE DESIGN & CONSTRUCTION

- 35. Loudon, Country Residences, 286.
- 36. Bernard M'Mahon, American's Gardener's Calendar (Philadelphia: B. Graves, 1806), 78.
- 37. Ibid., 84.
- 38. Loudon, Country Residences, 343.
- 39. John Claudius Loudon, An Encyclopedia of Gardening (London: Longman, Rees, Orme, Brown, Green, and Longman, 1835), 580.
- 40. L. R. Taft, <u>Greenhouse Construction</u> (New York: Orange Judd Company, 1915), 2.
- 41. John Hix, <u>The Glass House</u> (Cambridge: MIT Press, 1974), 11.
- 42. Lemmon, Covered Garden, 58.
- 43. Ibid., 60.
- 44. Ibid., 51.
- 45. M'Mahon, American Gardener's Calendar, 81.
- 46. Hix, Glass House, 10.
- 47. Rivinus, Lights, 13.
- 48. Thomas Hibbert and Robert Buist, The American Flower Garden Directory (Philadelphia: N.p., 1832), 345.
- 49. Loudon, Country Residences, 345.
- 50. M'Mahon, American Gardener's Calendar, 79.
- 51. Hibbert and Buist, Flower Garden Directory, 349.
- 52. M'Mahon, American Gardener's Calendar, 79.
- 53. Lemmon, Covered Garden, 57.
- 54. M'Mahon, American Gardener's Calendar, 79.
- 55. John Gardiner and David Hepburn, The American Gardener (Washington: Samuel H. Smith, 1804), 187.
- 56. Hibbert and Buist, Flower Garden Directory, 345.



- 57. M'Mahon, American Gardener's Calendar, 79-80.
- 58. Hibbert and Buist, Flower Garden Directory, 348.
- 59. Loudon, Encyclopedia of Gardening, 1012.
- 60. Hibbert and Buist, Flower Garden Directory, 348.
- 61. M'Mahon, American Gardener's Calendar, 84.
- 62. Lemmon, Covered Garden, 59.
- 63. Loudon, Country Residences, 344.
- 64. M'Mahon, American Gardener's Calendar, 84.
- 65. Loudon, Country Residences, 344.
- 66. M'Mahon, American Gardener's Calendar, 79.
- 67. Loudon, Encyclopedia of Gardening, 597.
- 68. Ibid., 581.
- 69. Hix, Glass House, 39.
- 70. M'Mahon, American Gardener's Calendar, 81.
- 71. Loudon, Encyclopedia of Gardening, 590.
- 72. Lemmon, Covered Garden, 57.
- 73. M'Mahon, American Gardener's Calendar, 85.
- 74. Loudon, Encyclopedia of Gardening, 591.
- 75. Ibid., 590.
- 76. M'Mahon, American Gardener's Calendar, 86.
- 77. "Morris Ledger C," 239, 245.
- 78. Lemmon, Covered Garden, 57.
- 79. M'Mahon, American Gardener's Calendar, 81.
- 80. Catlow, Popular Greenhouse Botany, 4.
- 81. Lemmon, Covered Garden, 57.
- 82. "Schedule of Property."
- 83. Loudon, Encyclopedia, 580.



COMPARATIVE ANALYSIS

- 84. Geraldine Duclow, interview with author 12 Oct. 1986.
- 85. Elizabeth Kellam de Forest, <u>The Gardens and Grounds of Mount Vernon: How George Washington Planned and Planted Them</u> (Mount Vernon, VA: The Mount Vernon Ladies' Association of the Union, 1982), 62.
- 86. Ibid., 64.
- 87. Ibid.
- 88. Forman, Old Buildings, 24.
- 89. Ibid., 69, 70.
- 90. Ibid., 70.
- 91. Ibid., 72.
- 92. Ibid., 71, 75.

CHAPTER 3 - CONCLUSIONS AND PROPOSALS

RESEARCH RESULTS

- 1. Bruce W. Fry, "The Digger versus the Bureaucrat: Archaeology's Role in Parks Canada," <u>APT Bulletin</u> 18, nos. 1 & 2 (1986), 41.
- 2. Ibid., 38.
- 3. In an attempt to investigate these paths, the widow of John Kistler was contacted. However, she was not aware of any action on the project. Other inquiries were equally unfruitful.
- 4. Fry, "Archaeology's Role," 99.

REVITALIZATION OF FAIRMOUNT PARK

- 5. Loudon, Country Residences, 3.
- 6. McLean, "Town and Country Gardens," 144.



- 7. Faris, Old Gardens, 284.
- 8. Ibid., 279.
- 9. Keyser, Lemon Hill, 28.
- 10. Lippincott, Early Philadelphia (Philadelphia:
- J. B. Lippincott Co., 1917), 110
- 11. Loeb, "Fairmount Park," 1.
- 12. Mrs. E. Norton Hunt, telephone interview with author, 23 Feb. 1987.
- 13. Loeb, "Fairmount Park," 1.
- 14. Ibid.
- 15. Ibid.
- 16. Vernon Loeb, "A Park Tour with a Goal: Preservation," Philadelphia Inquirer (18 June 1986), section B, 2.
- 17. Ibid.
- 18. Loeb, "Fairmount Park," 1.
- 19. Ibid.
- 20. Ibid.
- 21. Cochran, Fairmount Park, 53-4.
- 22. Loeb, "Fairmount Park," 1.
- 23. Keyser, Lemon Hill, 27.



ILLUSTRATIONS

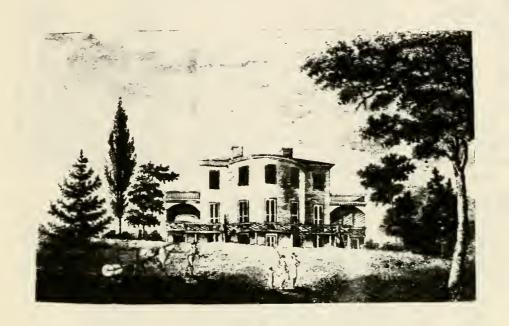


Figure 1: "Lemon Hill, the Seat of Henry Pratt Esq'r." (Free Library of Philadelphia).



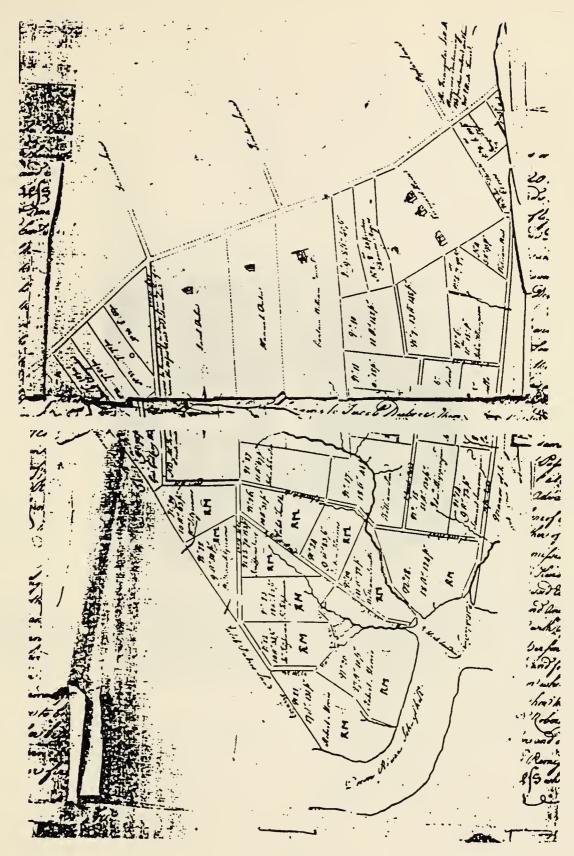


Figure 2: Map of the subdivision of the Springettsbury estate, showing lots 18-26, 28 and 29 in the possession of Robert Morris (R. M.). (Philadelphia City Archives).





Figure 3: Illustration often found with the caption, "The Hills, Favorite Residence of Robert Morris." This undoubtedly adds to the myths surrounding the present mansion. (Historical Society of Pennsylvania).





Figure 4: Photograph of "An Old House Formerly on the Site of Lemon Hill." (Fairmount Park Commission).



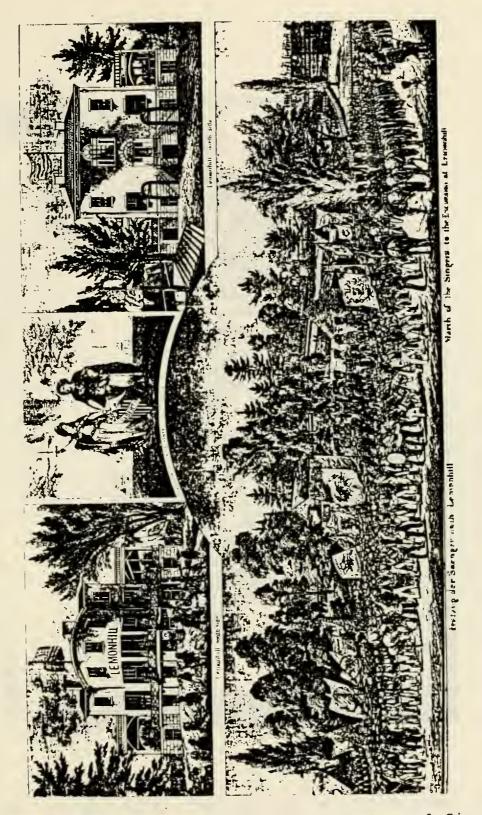


Figure 5: Detail of poster for the Seventh General Singer Festival held in June, 1857. The old house appears slightly left of center. Ruins of other structures appear right of center. (Fairmount Park Commission).



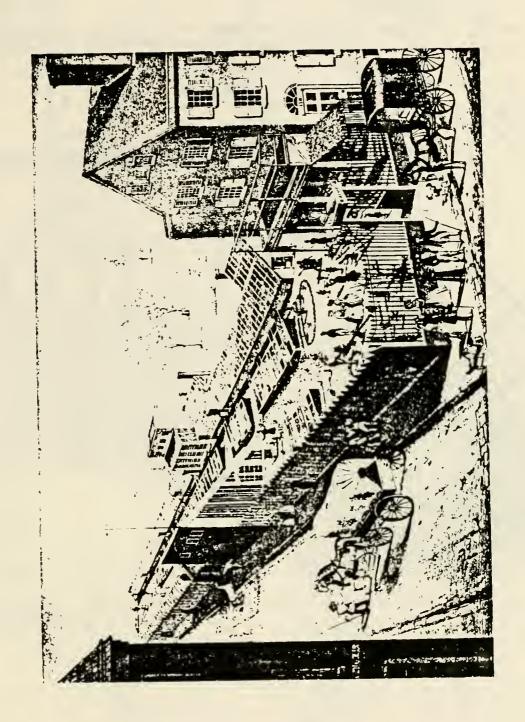


Figure 6: Alfred Hoffy, "Robert Buist's City Nursery, 1846. (From Nicholas Wainwright, <u>Philadelphia in the Romantic Age of Lithography</u>, 1958).



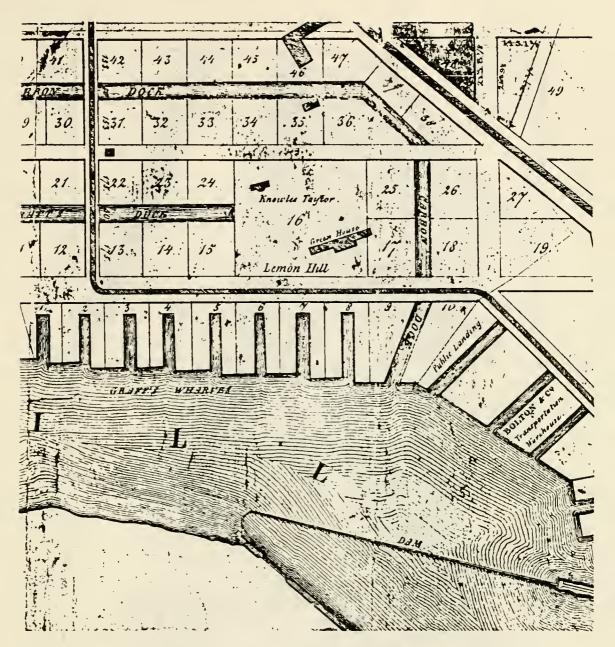


Figure 7: "Plan of the Fair Mount Docks." (Fairmount Park Commission).



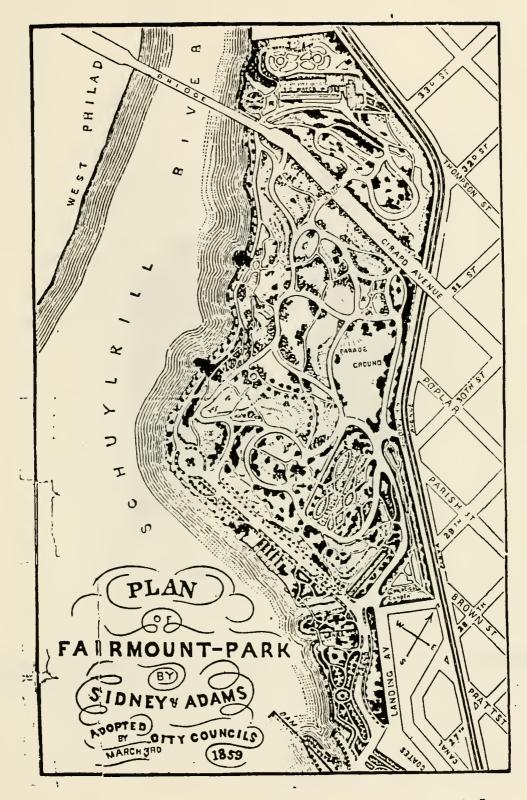


Figure 8: Sidney & Adams, "Plan of Fairmount Park." (Historical Society of Pennsylvania).





Figure 9: "East Terrace, Lemon Hill." (Historical Society of Pennsylvania).





Figure 10: "Scenery in Fairmount Park," photograph 1870s.
"Pond and steps leading to Garden Paths at Lemon Hill. View looking west." (Fairmount Park Commission).





Figures 11 - A & B: Views of the Music Pavilion at Lemon Hill. "Built during the Centennial Exposition in 1876, burned April 19, 1936." (Fairmount Park Commission).







Figure 12: Jeremiah Paul, "Robert Morris' Seat on Schuylkill," 1794. (Historical Society of Pennsylvania).



Figure 13: John Woodside, "Lemon Hill," 1807. (Historical Society of Pennsylvania).

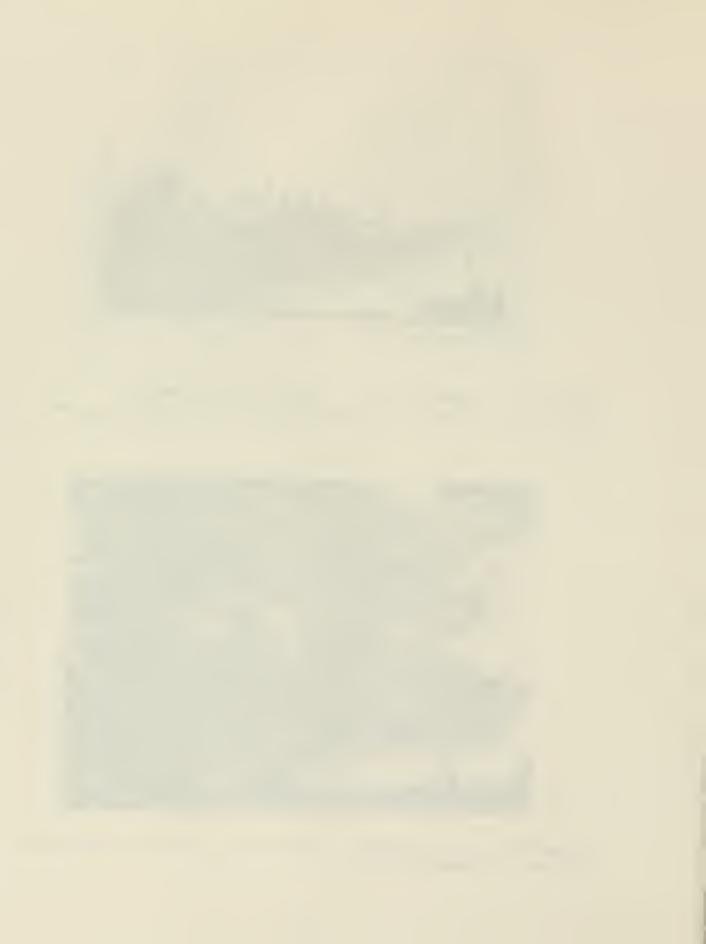




Figure 14: R. Campbell, engraving after T. Birch, detail of "View of the Dam and Water Works at Fair Mount, Philadelphia," 1824. (Free Library of Philadelphia).



Figure 15: Geo. Lehman, "Fairmount Waterworks From the Basin," 1829. (Historical Society of Pennsylvania).



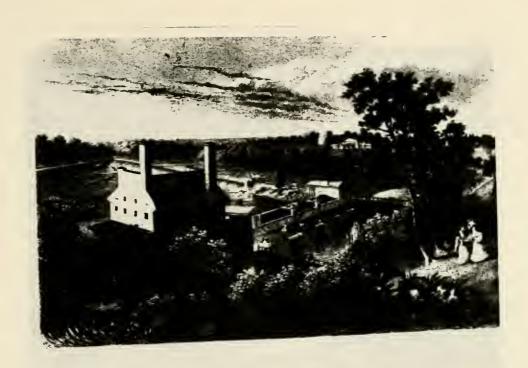
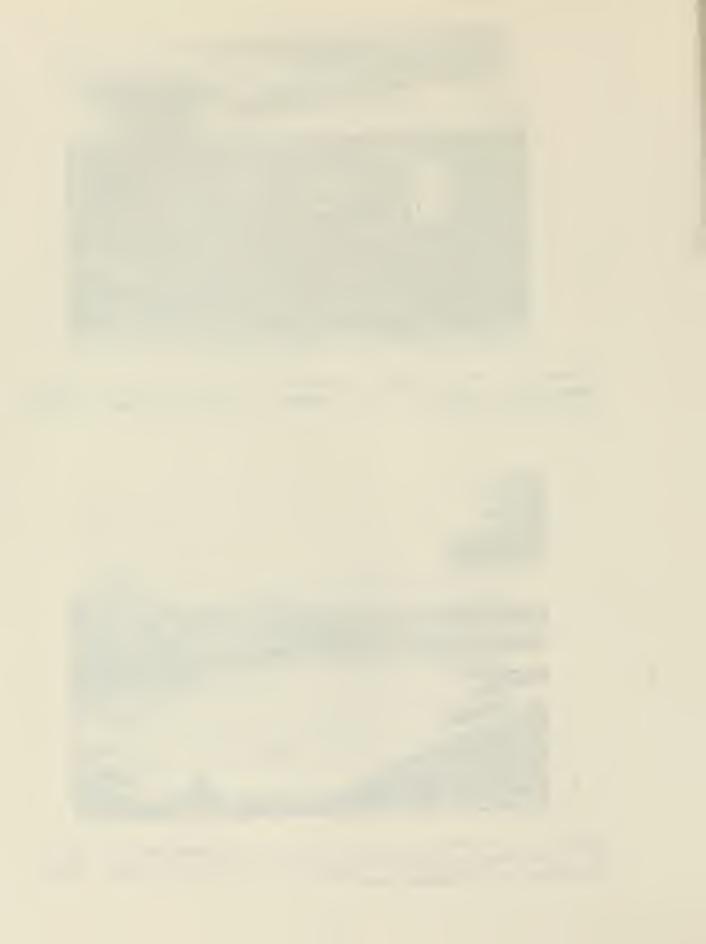


Figure 16: W. F. Tucker, engraving after T. Doughty, "Fairmount Water-Works from the Reservoir," 1829. (Free Library of Philadelphia).



Figure 17: Nicolino Calyo, "View of the Waterworks," 1835-36. (From Philadelphia Museum of Art, Philadelphia: Three Centuries of American Art, 1976).





Figures 18 - A & B: Ceramic plate, "Fair Mount Near Philadelphia." (Private collection).





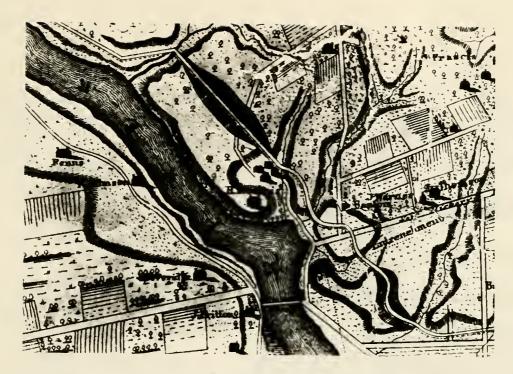


Figure 19: P. C. Varle, "Plan of the City and Its Environs," 1796. (Historical Society of Pennsylvania).

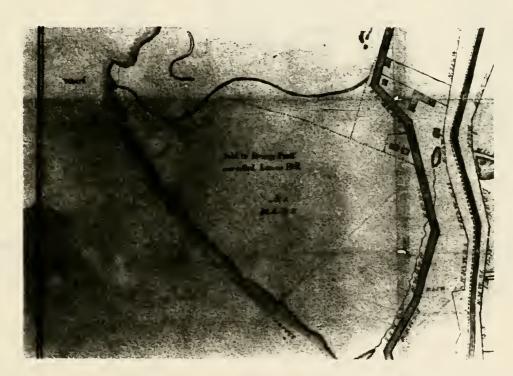
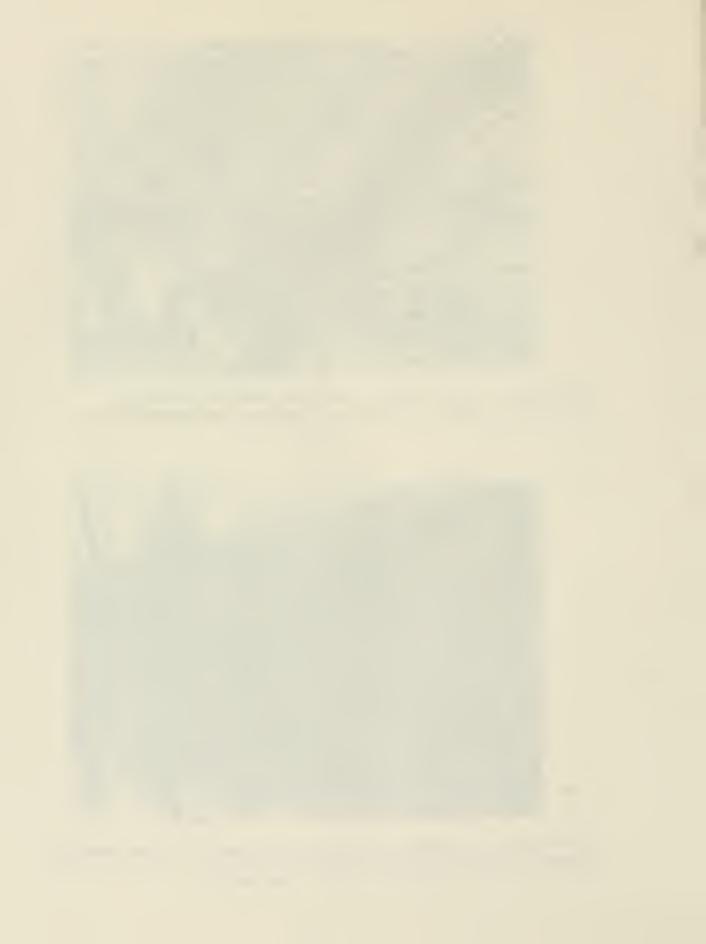


Figure 20: R. Howell, copied by R. Campbell, Map showing property labelled "Sold to Henry Pratt, now called Lemon Hill," 1799. (Fairmount Park Commission).



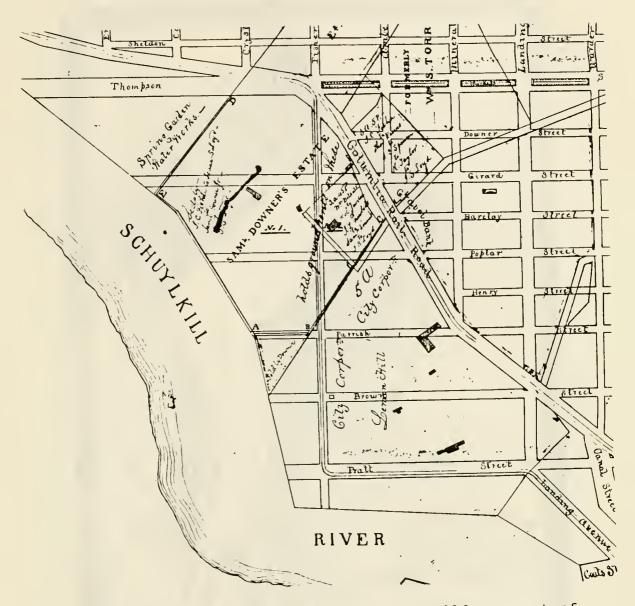
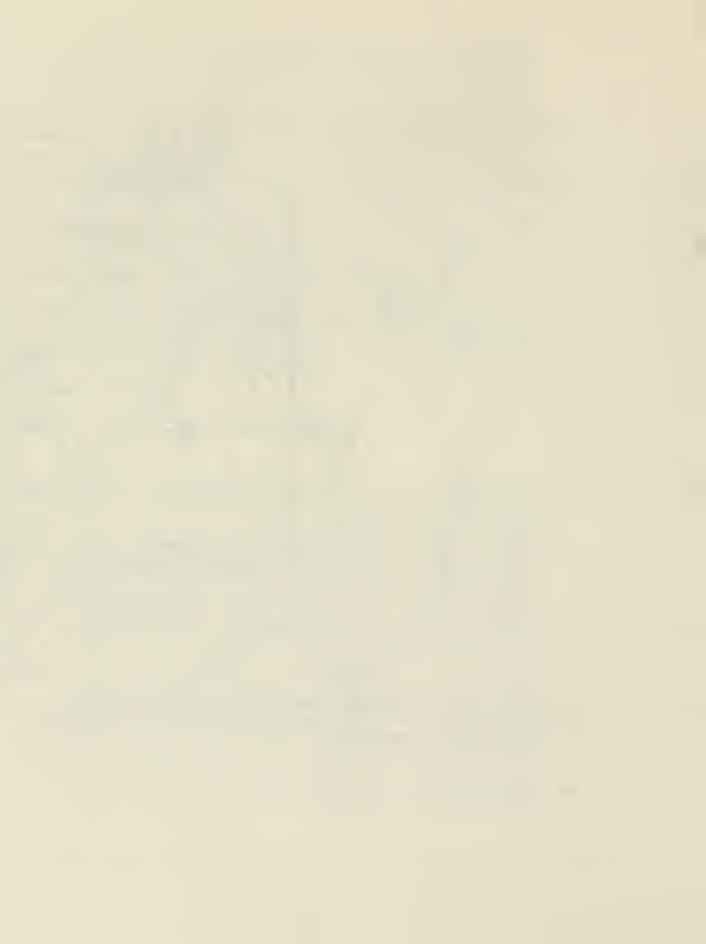


Figure 21. Map, c.1851[?], showing Lemon Hill as part of the City Corporation. The greenhouse is still indicated. (Fairmount Park Commission).



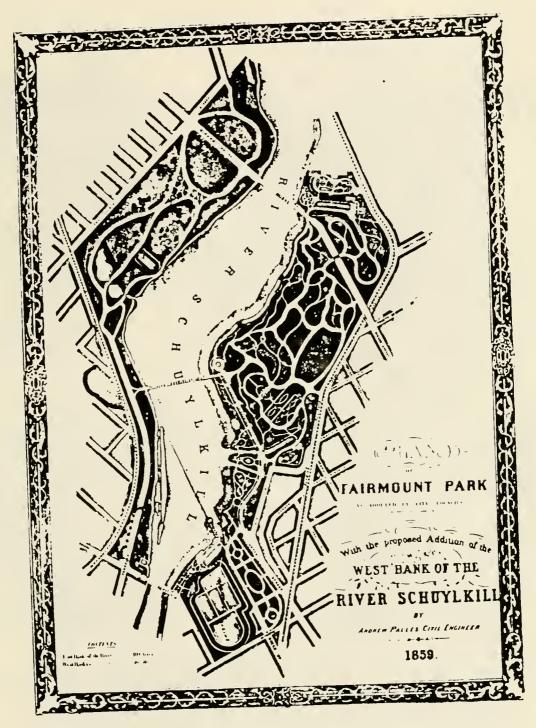


Figure 22: Andrew Palles, "Plan of Fairmount Park as Adopted by City Councils," 1859. (From Philadelphia Museum of Art, Three Centuries of American Art, 1976).



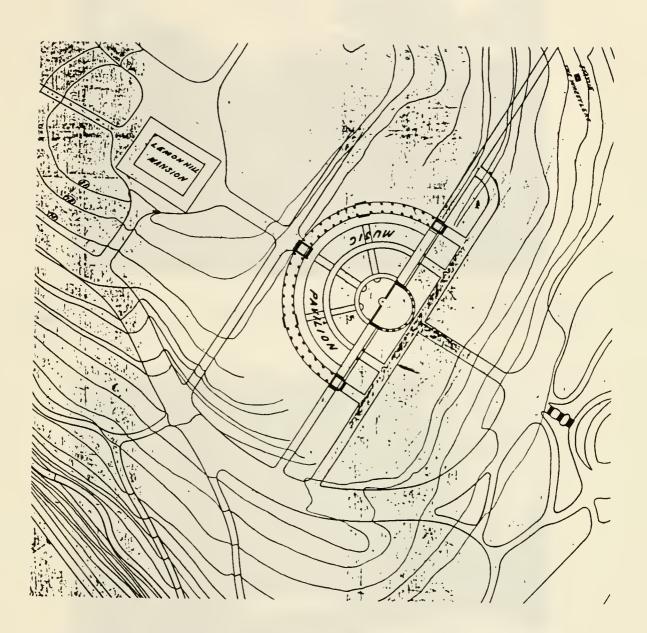


Figure 23: Topographic Map of Fairmount Park, 1917. (Fairmount Park Commission).

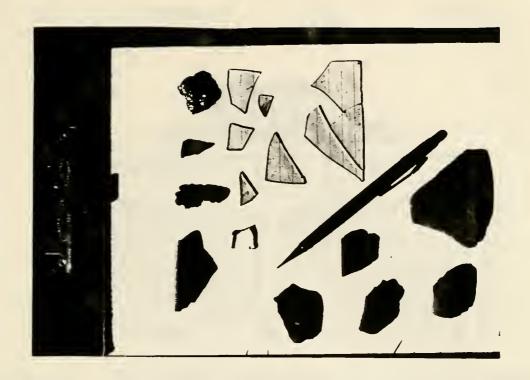




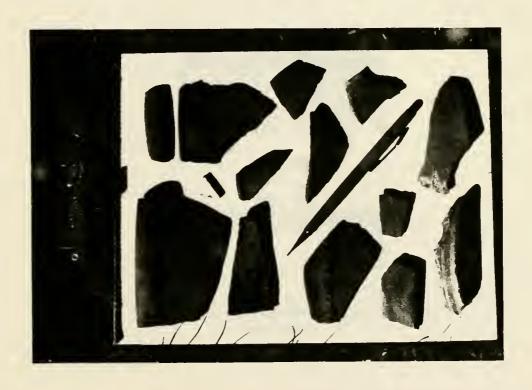
Figures 24 - A & B: Photographs of bluff in the grounds of Lemon Hill, 1987.







Figures 25 - A & B: Photographs of clay potsherds and glass found on the grounds of Lemon Hill near bluff, 1987.





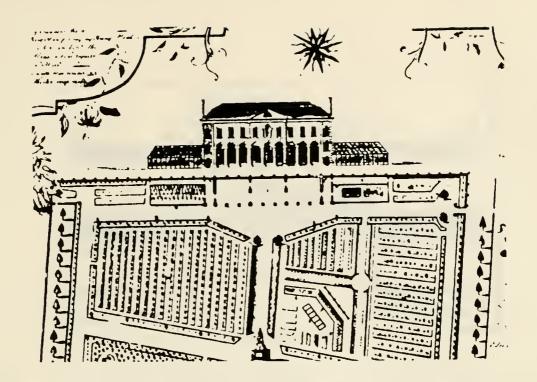


Figure 26: John Haynes, "An Accurate Survey of the Botanic Gardens at Chelsea," 1751. Detail shows greenhouse with flanking hothouses. (From John Hix, The Glass House, 1974).

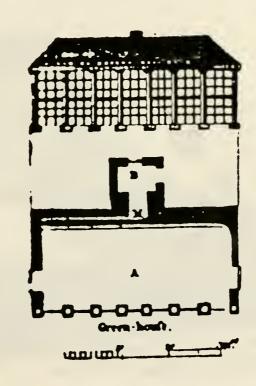


Figure 27: John Abercrombie, "Greenhouse," 1794. Shows plan with furnace indicated. (From Kenneth Lemmon, <u>The Covered Garden</u>, 1962).



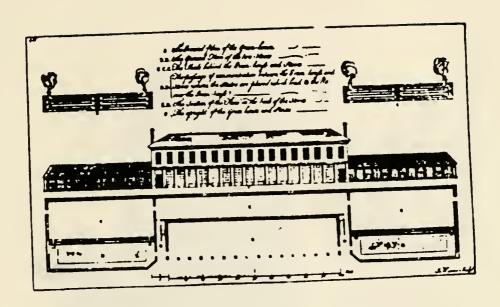


Figure 28: Philip Miller, [Plan for a Greenhouse], 1759. Shows the many bends in the flue system of the back wall. (From Kenneth Lemmon, <u>The Covered Garden</u>, 1962).



Figure 29: George Washington's Mount Vernon Orangery with flanking slave quarters. (From Elizabeth Kellam de Forest, The Gardens and Grounds of Mount Vernon, 1982).



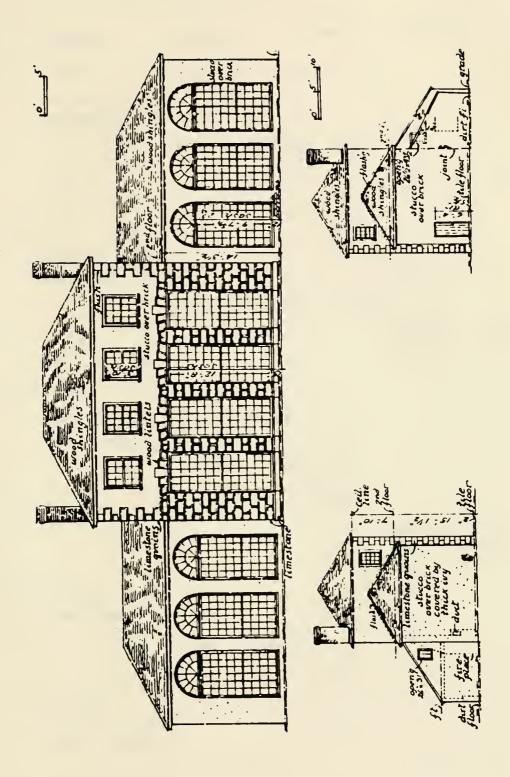


Figure 30: Orangery at the Wye House in Maryland. Measured drawings from H. Chandlee Forman, <u>Old Buildings</u>, <u>Gardens and Furniture in Tidewater Maryland</u>, 1967.



APPENDIX A - CHAIN OF TITLE

<u>Date Grantor Grantee Means Reference</u>

Oct 6,7, 1708

Wm Penn, Elder, Wm Penn, Younger

Henry Gouldney, et al

Book I 6, vol 7, p 83

Nov 10, 1711

Wm Penn, Henry Gouldney, et al

Edward Shippen, et al

Book I7, vol 8, p 125

Jul 10, 1718

Richard Hill, Isaac Norris, and James Logan

Jonathan Dickenson

Patent

Patent Book A, vol 5, p 341

May 8, 1722

Jonathan Dickenson

John Dickenson

Will

March 25, 1792

John Dickenson

Mary Jones

Will



Means Reference Date Grantor Grantee May 9, 1751 Somerset Jones Robert Jones Will July 15,16, 1768 Robert Jones Tench Francis Deed Book I, vol 5, p 339 July 17, 1770 Tench Francis Robert Morris Deed Book I, vol 7, p 350 March 28, 1799 Jonathan Penrose, Sheriff Henry Pratt Deed Book 76, p 488 Feb 29, 1836 Henry Pratt

Knowles Taylor

Deed

Deed Book AM, no 66, p 348



Date Grantor Grantee Means Reference

Sept 12, 1840

Daniel Fitler, Sheriff

Henry J. Williams

Sheriff's Deed

Deed Book GS, no 22, p 443

July 24, 1844

James Dundas, et al

Mayor Alderman of Philad.

Deed Book RLL 20, p 663



Ord- Tehrdule of Property within the State of Sennsylvania Conveyed by Robert Morris, to the Hon. James Biddle Est, and M. William Bell, in Trust for the use and accounting The Pennsylvania Property Company.

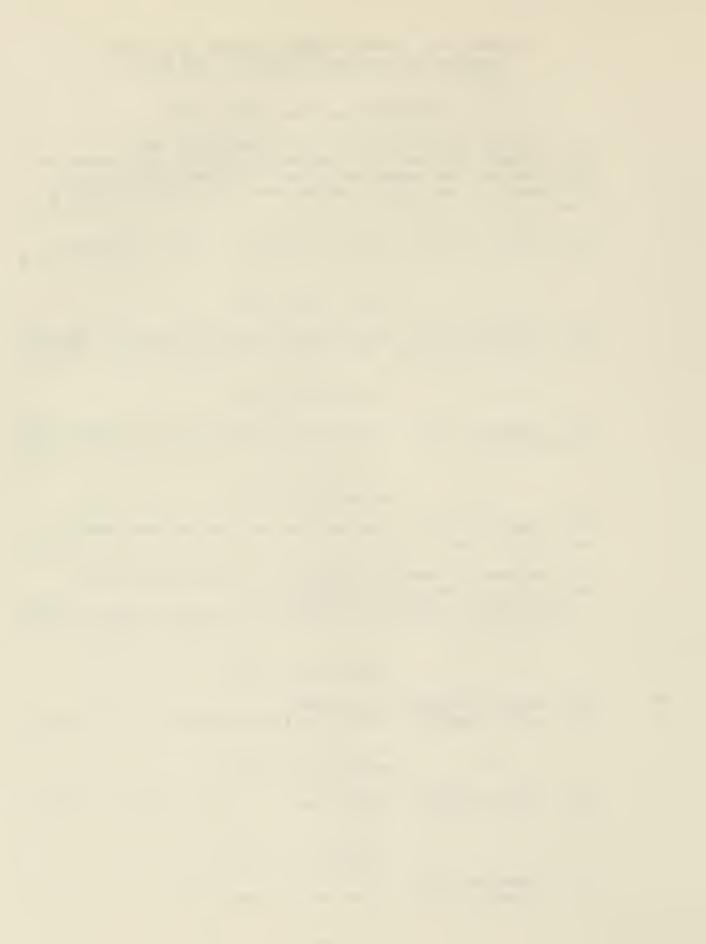
ONE 1. An Estate called The Hills fleate in the Northern Leberties, near the City of Philocololphie' containing The hundred acres of land highly improved, and on which are created a large indignate green house, with a not house of fuffly fact pour a mach will inside like front - Lower fore quelan with a laterier on large and fire busharons also tim large cooms on the last or worth front ofthe Let houses with an excellent route under the green house, and it covered room for preserving sort of in winter; the whole being a strong stone bulding with the resolvery glafois, casemonto, fruit trees, plants shrubbs de in good order, a well fexcellent water with a pump close to the north front the whole enclosed within a large Garden stocked with fruit hees of the best kind & & . Aspining is this gordon is a farm house and ketinen, a spring house and a grazary orstore room over it, a look house barn and Stables large bowhouse with auched doorways, and hay lofts own the whole, a low house and hog pens. Alt these buildings are solid so strong being built of stone, less des which there are always and other frame buildings, complet for a farmer. There is another farm house and Ritchen built of brick, and a stone barn, distant from the above mintioned so as to divide the lands into two farms, the first being on the West and the latter on the East side of the Canal which Canal has its course through this estate, and when carried ento full operation will un gues troubles increase the value greatly, as the lands on each side of the Canal may be divided into convenient tracts of 4, 5, 6, to 10 Meres, and will be sough ofter by Cotozens of Ineladelphia, who wish to get out of the City lon the Summer months, in order to build Junmer houses on the pleasunt and delight ful setuations which abound on these grounds. The canalwill afford the means of transporting at Last expense every thing the want to or from the City and of purchasing such articles as may be sent down from the interior country for sale. Trices now deemed patty high have already been offered for sected in these grounds, but it is school that a short period of time will hung forward purchasers at 1: 2 An Esilate called "The Front Spring containing upwards of one hundred and serty acres Gitaite in Upper Vilerion township Montyomery County bordering on the river schuylkill nearly officite Norriston



APPENDIX C: ROBERT MORRIS JOURNAL 1791-1801. Extract of Entries related to The Hills.

Philadelphia Dec. 26th 1791

.242 Estate their accoun W'm Crouch a	Accounts Dr to John Pinkerton & Son on Schuylkill called the Hills, for amount of ot for sundry articles of Ironmongery supplied at the Hills, Springetsbury &c. from 8th Feb'y th January 1789 L 39.12.10
.415 Will' ditto	m Crouch Tenant at the Hills for ditto 3.15.8
	Dec. 31st 1791
.463 Expens	es 1791 - paid Mich'l Wartman for Dung & Halling Garden at the Hills
	January 7th 1792
.492 Expens	es 1792 - paid Jacob Graffs bill for Bricks used
	January 14th 1792
.492 Expens	es 1792 - paid Excise on a Hhd of Rum sent to Aug't 1788
Estates in to County Tax	t of Taxes - paid the following Taxes on my the Northern Liberties on the Hills valued at L 3750 a 5/10 10.18.9 Cax 250 a 2
	January 21st 1792
	Accounts Dr to Cash Landreth - paid him 16th Instant 7.10
	February 11th 1792
.313 David	Landreth - paid him 7.10
	February 18th 1792
.492 Expens	es 1792 I for repairing Pump at the Hills7.6



March 17th 1792

.492 Expenses 1792 - paid freight of a box with a Tree from Charlston [sic]4.8
.313 David Landreth - paid him 25th ult 11.5.0
.463 Expenses 1791 Dr to Joseph Skerrett Blacksmith for amo't of his account for sundry Iron Work done at the Hot House at the Hills from August to Novem. 1791 L38.9.9
April 7th 1792
.463 Expenses 1792 - paid for repairing the Pump at the Hills
-paid Jn'o Ludwick for 2 New barrow for D. Landreth 1.5
.313 David Landreth - paid him 4th Instant 11.5
April 14th 1792
.492 Expenses 1792 - paid for 2 water Potts [sic] & a water Engine for David Landreth L 3.0.0 -paid Hire of two Coachees [sic] to bring Indians from the Hills 1.2.6
May 7th 1792
.492 Expenses 1792 - paid A. Matterns bill for Flower Potts delivered D, Landreth 0.10.6
.313 David Landreth - paid him 5.12.6
June 1st 1792
.313 David Landreth - paid him 19th Instant 20.0.0
June 8th 1792
.470 Sundry Accts. Dr to Cash .242 Estate called the Hills - paid Christian Harts account for Dung & Halling L 8.2.0 -paid Ab'm Kintzings account for Dung & Halling from 1787 to 1789 61.11.1



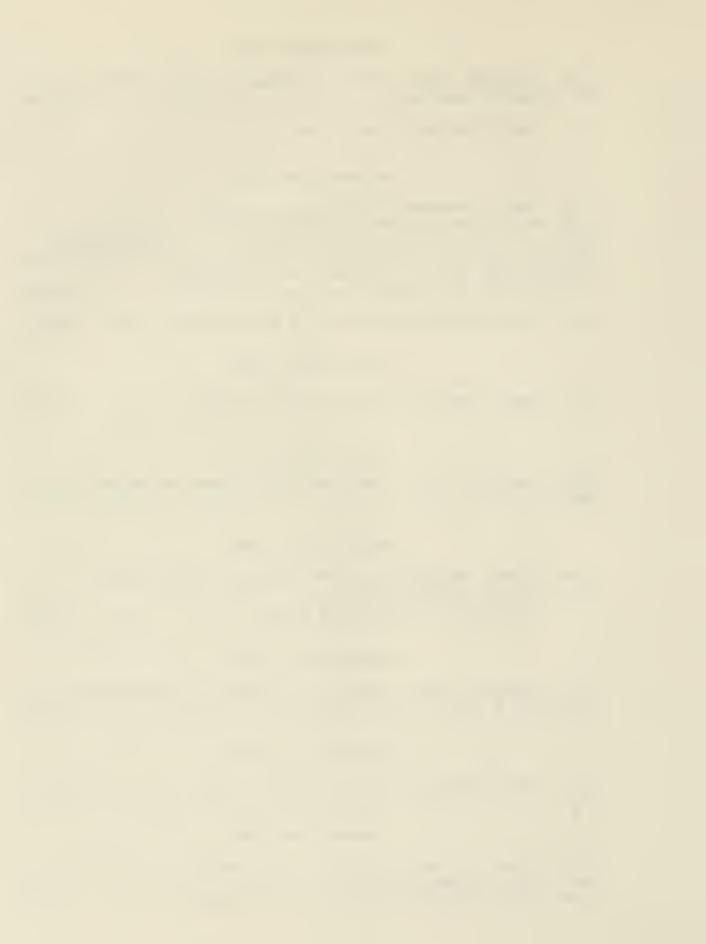
June 25th 1792

.492 Expenses 1792 - paid for halling Bricks to hot house at the Hills 1.2.6
August 4th 1792
.313 David Landreth - paid him 4th Instant 11.6.2
August 18th 1792
3.11.21.11
.492 Expenses 1792 - paid Jos. Skerrett for blacksmith work at the Hills 1.2.6
.313 David Landreth - paid him 18th Instant 9.0
August 31st 1792
.184 Sundry Accounts Dr to W'm Stiles Stone Cutter
.242 Estate called the Hills for sundry stone work done by him at the Hot and Green Houses from October 1784 to December 1785 p. Acco't L 458.9.1 for amount of his account to January 1786 188.17.11
.463 Expenses 1791 Dr to David Landreth .313 for one years wages due 19th Decem'r 1791 L70 for 52 weeks board wages to 1st Jan'y 1792 39
L 109 for sundry Labourers wages paid by him during 1791
for sundries for the use of the Garden 17.1.2
.313 David Landreth Dr. to Expenses 1791 for sundry articles sold by him in market amounting to 105.9.2
.313 David Landreth new a/c Dr to David Landreth old a/c .313 for the following payments made him since January 1792
which I bring to new acco't
Jan'y 14th L7.10 Feb'y 11th L7.10 Feb'y 25th L11.5
April 4th Lll.5 May 5th L5.12.6 May 19th 20.0. Aug't 4th Lll.6.2 Aug't 18 L9.0
.313 David Landreth old a/c Dr to David Landreth new a/c
for the balance in his favor to the 1st January 1792



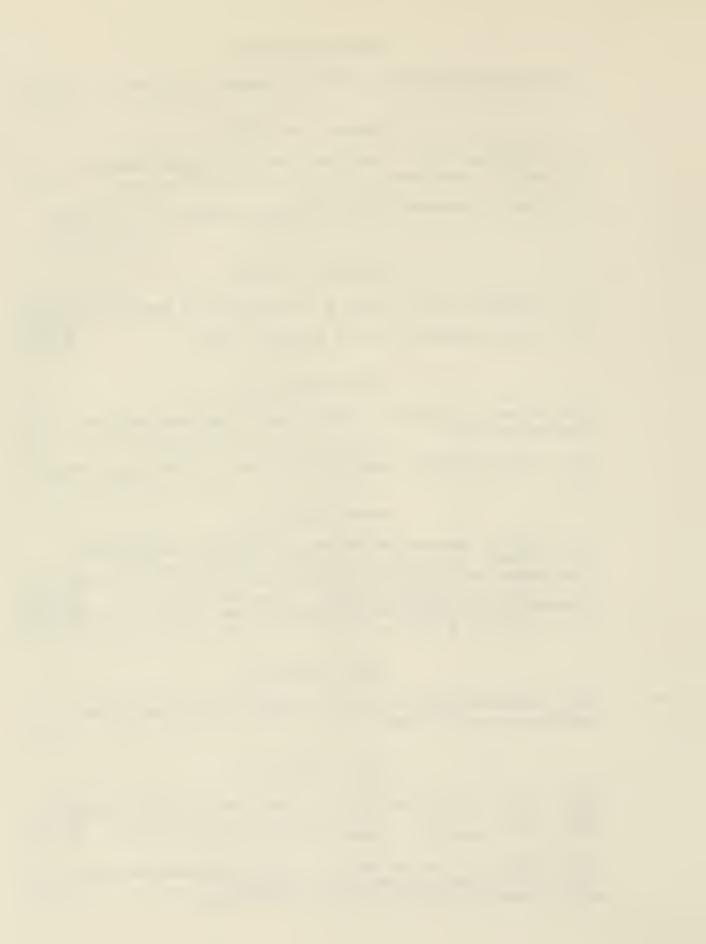
Sept. 22nd 1792

.492 Expenses 1792 - paid J. Letham for fruit Trees &c. delivered D. Landreth 10.18.6
.313 David Landreth - paid him 20.0
October 22nd 1792
.350 Sundry Accounts Dr to George Ludlam .242 Estate called the Hills for amount of his account for glazing the Hot & Green House windows &c to 31st December 1791 L 41.4.10 for painting ditto ditto L152.16.6 a deduction he makes 10.0.0 142.16.6
.313 David Landreth paid him on account 17th Inst. 50.0
Novem'r 10th 1792
.313 David Landreth paid him 10th Instant 11.5.0
Nov. 18th 1792
.492 Expenses 1792 - paid for Fruit Trees purchased by D. Landreth 4.10.9
Novem'r 24th 1792
.184 Sundry Accounts Dr to W'm Stiles Stone Cutter .242 Estate called the Hills for amount of work done there
December 8th 1792
.492 Expenses 1792 - paid for halling 12 loads of Coal to the Hills @ 11/3d 6.15.0
December 31st 1792
.313 David Landreth - paid him 26th Inst 20.0
January 5th 1793
.242 Estate called the Hills - paid [Paxton & Richardson acco't for Ironmongery]



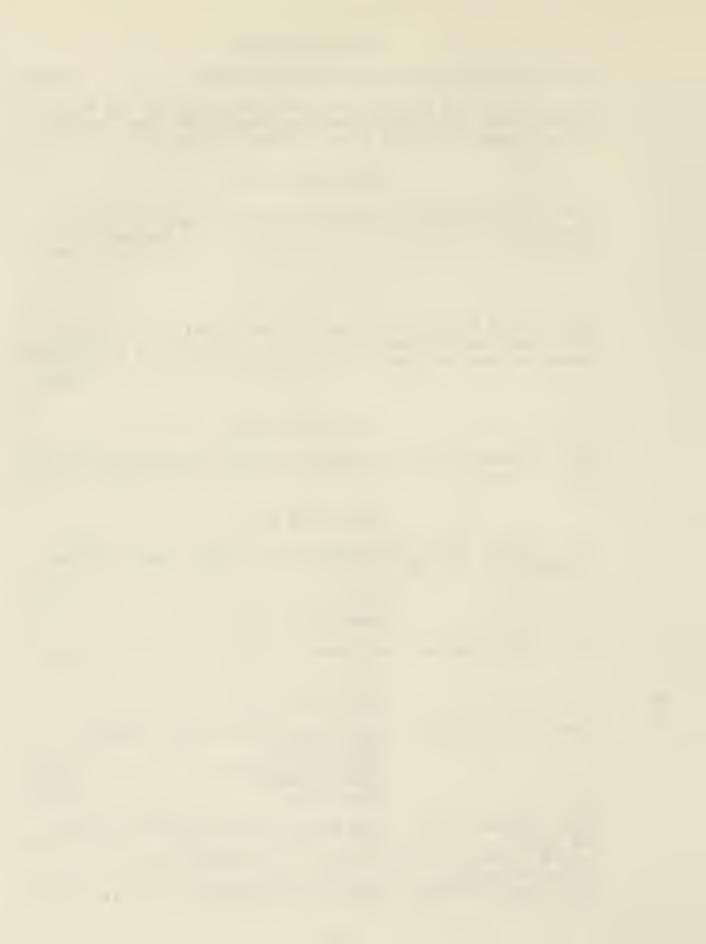
January 12th 1793

.549 David Landreth - paid his brother 12th Inst. 11.5
February 2nd 1793
.547 Expenses 1793 - paid for two iron bound Buckets delivered D. Landreth15.0
.549 David Landreth - paid him 5th Instant L 7.10 9th 4.10
Fobruary 224 1702
February 23d 1793
.547 Expenses 1793 - paid A. Matterns bill for flower Potts 7.6.0
.549 David Landreth - paid him 21st Inst. 7.10
March 3rd 1793
.242 Estate called the Hills - paid Jos. Skerrett for Blacksmith work
.549 David Landreth paid him 27th Feb'y 100 D'rs 37.10 -
March 11th 1793
.515 Sundry Accounts Dr to Burton Wallace Bricklayer .242 Estate called the Hills for 232 days work of Bricklayers at the Hills @ 8/6 p. day L 98.12.0 175 [days] do. Laborers do. 5/9 50.6.3 Commencing 23d July and ending 10th Dec. 1791 148.18.3 Cost of Bricks & Tile &c
March 19th 1793
.242 Estate called the Hills - paid Rich'd Mosely for Carpenters work p. acco't
April 18th 1793
.242 Estate called the Hills - paid [Geo. Ludlam plumbers bill]
.242 Estate called the Hills - paid Jacob Graffs acco't for Bricks dilivered by order of B. Wallace L 3.1.3 paid J. West for Lumber delivered R. Mosely 5.8.10



April 22d 1793

.549 David Landreth - paid him 17th Inst 11.5.0
.415 W'm Crouch paid Philip Nicklin & Co'y for the cost of Clover seed, Rye Grass, Beans and Peas which they imported from Liverpool for him at my request p. acco't 52.1.9
April 29th 1793
.242 Estate called the Hills - paid W'm Lanes Acco't for lime used by Burton Wallace at the Hills in February and March last 18.9.0
June 8th 1793
.385 David Gray Dr to Estate called the Hills, for two years rent due the 19th March last, on a part of said Estate leased to him 19th March 1791 @ L100 p. ann. for 3 years 200.0
July 12th 1793
.217 Account of Taxes - paid Road Tax on Estate called the Hills 10.8.4
July 22nd 1793
.217 Account of Taxes - paid poor & County Tax on Estate called the Hills
August 31st 1793
.549 David Landreth paid him 27th Inst. D'rs 40 15.0
Nov. 30th 1793
.549 David Landreth - paid him at the Delaware Works 13th October 30th at the Hills 20th November 21st do. L 3.15.0 7.10 1.17.6
.547 Expenses 1793 - paid for halling 4 loads of Coal to the Hills 3.0.0
the Hills



December 8th 1793

.549	David Landreth - paid B. Bohler on his account	60.6.0
	December 16th 1793	
.549	David Landreth - paid him 11th Instant	11.5.0
	January 11, 1794	
.549	David Landreth paid him 31st Decem'r 30 D'rs	11.5.0
	January 25th 1794	
.549	David Landreth paid him 21st Inst't 30 D'rs	11.5.0
	February 15th 1794	
the Tr	Society for promoting the Cultivation of Vines - reasurer Israel Whelen the first Payment on my ription for 10 Shares \$100	•
	W 1 2 4 2704	
	March 1st 1794	
.242	David Gray Dr to Estate called the Hills for a years Rent of a House & part of said Lands Instant when his lease expires	
.242 of put	Sundry Accounts Dr to David Gray Estate called the Hills for Posts & Rails and exp tting them up, which by the Terms of the Lease I v	was to
	Expenses 1794 - paid W'm Rogers for halling Dung ills	
	March 3rd 1794	
	Expenses 1792 Dr to David Landreth for a years wages to 19th December 1792 L 52 weeks board wages to 1st January 1793 @ 15/ for sundry wages paid by him to Labourers &c 1996 for sundry articles purchased by him for the use the Garden 27	39.0.0 2.10.9 of
	David Landreth Dr to Expenses 1792 for sundries sold by him in market 14	4.11.3



March 10th 1794

narch 1000 1771
.547 Expenses 1793 paid Mic'l Wartman for halling Dung to the Hills p. D. Landreths directions 63.1.5
March 18th 1794
.549 David Landreth paid him 7th Inst. 50 Doll. 18.15
March 22nd 1794
.549 David Landreth padi him 17th Instant 30
.242 Estate called the Hills Dr to Burton Wallace .515 for the amount of an account he rendered for work in 1793 L 72.10.3 Deduct L18.9/ for Lime charged therein which I paid18.9.0
March 28th 1795
.547 Expenses 1793 Dr to David Landreth .549 for a years wages due 19th Decmber last L70 for 52 weeks board Wages at 15/p for labourers wages up to 31st Dec'r p. acct. 192.16.3 for sundry articles purchased by him for the Garden p. acco't
.549 David Landreth Dr Expenses 1793 .547 for sundry articles sold out of the Garden this year p. account
.549 David Landreth Dr to Account of Balances .575 for the balance transferred to his credit ledger C Doll's 340.25 127.11.10 1/2
April 22nd 1797
.242 Estate on Schuylkill called the Hills .306 Dr to Jacob Burket for the balance of his acc. 45.2.6
May 13th 1797
.242 Estate called the Hills .446 Dr to Acco't of Posts & Rails for the balance 62.4.10
[The handwriting changes after November 17, 1797; the next entry is December 27. The last entry is June 26, 1801.]



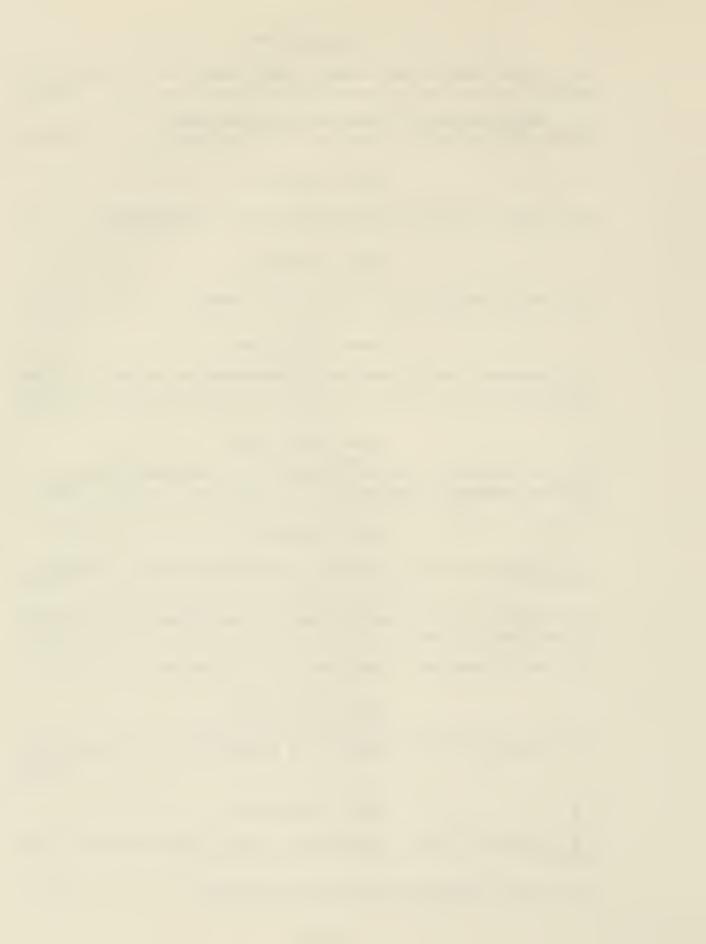
ROBERT MORRIS JOURNAL 1794-1801 (LEDGER C)

April 19th 1794
.18 Expenses 1794 - paid J. Standley for Dung p. Landreth's order \$ 16.60
order
May 10th 1794
.66 David Landreth my Gardener at the Hills, paid 7th Instant \$ 85.17
May 17th 1794
.66 David Landreth - paid him 15th Inst \$ 80
May 31st 1794
.18 Expenses 1794 - paid A. Matterns aco't for Flower Potts delivered Landreth \$ 19.37
July 7, 1794
.89 Estate called the Hills - paid W'm Inman for 55 1/4 acres of Rye and about 5 acres of fallow on the Farm formerly occupied by Gray which I have now Rented to Jasper Moylan L 27.12.6
August 26th 1794
.89 Estate called the Hills - received of James Daniel one years Rent of a two acre Lott of Ground on Schuylkill part of Springetsbury Manor due 1st Inst't Dollars 16.0
August 27th 1794
.66 David Landreth - paid him 13th Instant \$ 20.
Sept. 18th 1794
.66 David Landreth - paid him the 2'd Inst't \$ 60.0
Sept. 19th 1794
.66 David Landreth - paid him fifty dollars 50



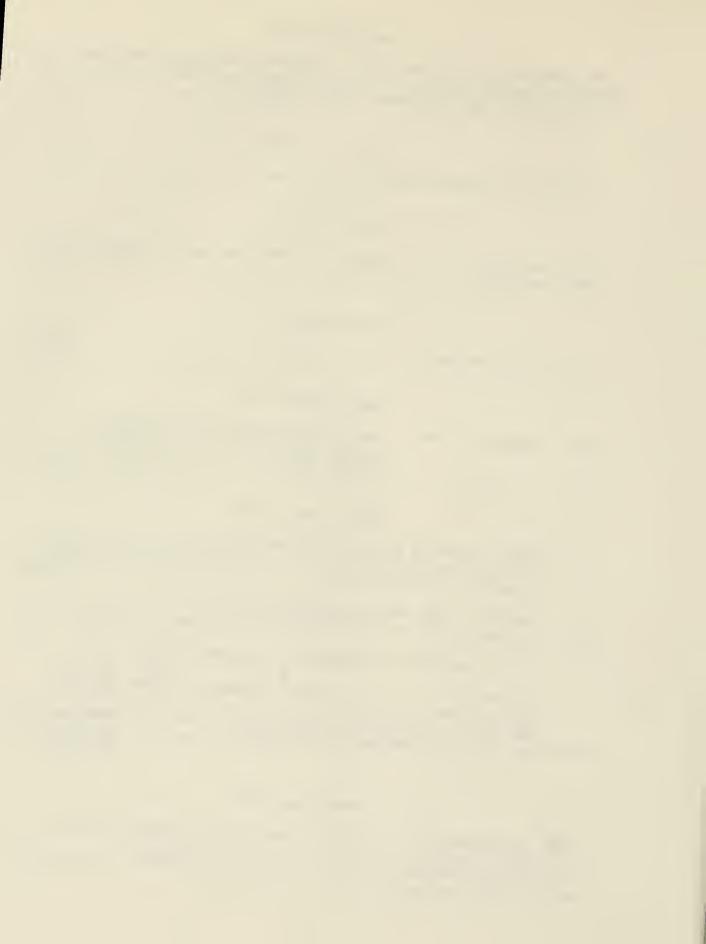
Oct. 11 1794

.89 Estate called the Hills - paid taxes the 11th Inst't p. receipt
.66 David Landreth - paid him the 11th Inst. Eighty Dollars
Nov. 1st 1794
.89 Estate called the Hills paid for a Certificate .75
Nov. 8th 1794
.66 David Landreth paid him the 8th Inst't 70
Nov. 15th 1794
.18 Expences 1794 - paid for a Landscape of the Hills Green House &c
Nov. 24th 1794
.135 Wm Crouch my tenant at the Hills, received from Gersham Johnston 19th Inst't
Dec. 13th 1794
.18 Expenses 1794 - paid David Landreths order to Standby for Dung
.18 Expenses 1794 - paid Lethen [?] for plants delivered to D. Landreth 9.13
.66 David Landreth - paid him the 3'd Instant 60
Dec. 31st 1794
.18 Expenses 1794 - paid for 12 loads of Dung to the Hills 14.40
Jan. 3rd 1795
.18 Expenses 1794 - paid for halling 4 loads of Coal to the Hills 8
.66 David Landreth paid him the 3rd Inst 100



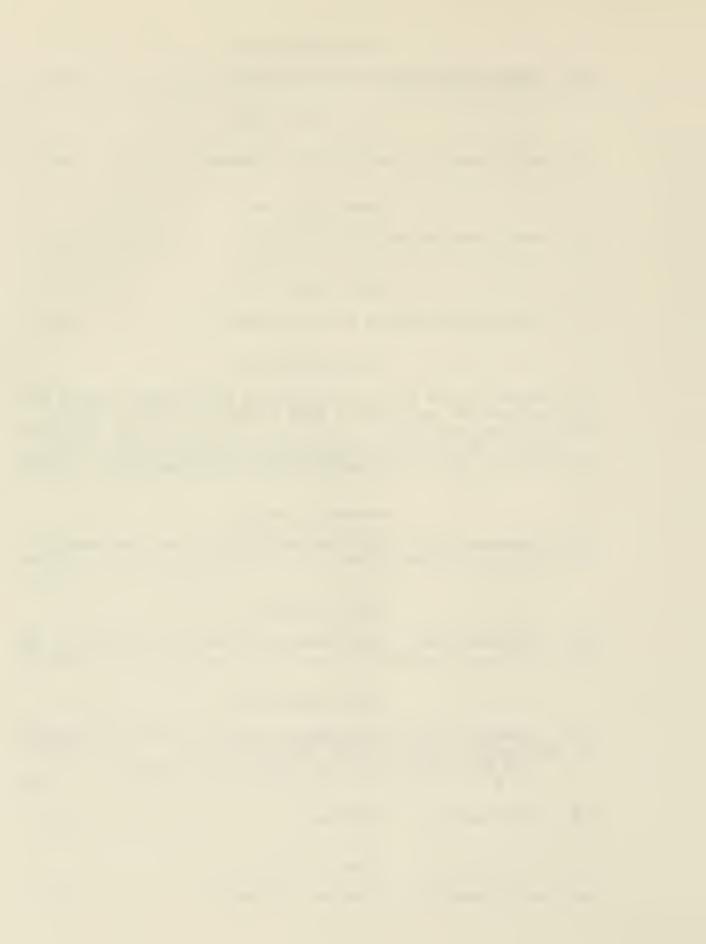
Jan. 12, 1795

.89 Estate called the Hills - paid B. Wallaces Acc't of Wages of Brick layers & labourers employed there under direction of the Gardener & M'r Crouch					
Feb. 12th 1795					
.66 David Landreth paid him 7th Inst't 50					
Feb. 28th 1795					
.147 Expenses 1795 - paid for 15 Waggon [sic] loads of Dung sent Landreth 20					
March 20th 1795					
.66 David Landreth 50					
March 25th 1795					
.147 Expenses 1795 - paid Jos'h Skerrett for Smithwork at my House L 5.2.10 at the Hills 2.8.1 \$ 20.12					
April 24th 1795					
.66 David Landreth Dr to Expenses 1794 .18 for sundries sold by him from my Garden at the Hills p. acc't 31st Dec'r 1794 L 119.14.11 1/2 \$ 319.33					
.18 Expenses 1794 Dr to David Landreth .66 for his wages for one year due 19th Dec'r 1794 L 70					
for 52 weeks Board wages to 31st Dec'r 1794 @ 15/ 39 109.0					
for amo't of his acco't for Labourers wages to 31st Dec'r 1794					
June 1st 1795					
.147 Expenses 1795 - Paid A. Mattern for Garden Potts delivered Landreth					



June 15th 1795

.66	David	Landreth	paid h	im 10t	h Inst	't	• • • • •	50
			Jul	y 21st	: 1795			
.66	David	Landreth	paid h	im 18t	h Inst	ant	• • • • •	100
			Sep	t. 7th	1795			
.66	David	Landreth	paid h	im 2'd	Inst.	• • • • •	• • • • •	10
			Sept	. 22nd	1795			
.66	David	Landreth	paid h	im on	accoun	t	• • • • •	80
			Octo	ber 5	h 1795			
a yea Gray	ars Ren due ls Edeuct	called to the st June 17 an allow Pump rai	House 195 wance n	& Fari	n forme	rly occ greemen	t for pu	y W'm 333.33 atting
			Noven	ber 1	7th 179	5		
		ses 1795 2/8 for Ho						
			Dec	. 7th	1795			
		ses 1795 vered Land						
			Dec	. 12tl	n 179 5			
	00 bus	ces 1795 sh's Coals Sam'l Wes	s for t st & Co	he Hil	lls 250 Sh	ingles	for	\$179.11 79.11 3.33
.66	David	Landreth	- paid	him	• • • • • •	• • • • • •	• • • • • •	120
			De	c. 31	1795			
.66	David	Landreth	- paid	him :	l6th In	st't		180



.89 Estate called the Hills - paid J Skerrett bl for work done there	
Jan. 6th 1796	
.120 Account of Taxes - paid Tax on Estate called the Hills .	98.2
Jan.25 1795	
.225 Expenses 1796 - Paid Andrew Mattern's acco' flower Potts	
.147 Expenses 1795 Dr to David Landreth .66 for amount of his account for labourers wage December 1795	the use of
L 398.9.8 1/2	or 1062.62
.66 David Landreth Dr. to Sundry Accounts .147 Expenses 1795 for amo't of sundries sold by my Garden & Green House at the Hills in the year p. acc't L 112.8.5 1/266 David Landreth New acc't for the balance due Jan'y 1796 L 230.0.5 1/2	1795 Dol. 299.80 him to 1st
Feb. 8th 1796	
.66 David Landreth - paid him 3'd Ins. \$150 6th	\$150 300.
Feb. 20th 1796	
.66 David Landreth paid him on Acco't 20th Inst'	t 150
March 7th 1796	
.66 David Landreth - paid him lst Inst't	. 163.27
April 11th 1796	
.89 Estate called the Hills - paid B. Wallace fo	



April 27th 1796

.238 Cuthbert Landreth paid him 25th Ins.t \$20 & 80
May 10th 1796
.89 Estate called the Hills paid J. Ryan in part of his acct. for halling
May 16th 1796
.238 Cuthbert Landreth - paid him 11th 50
May 18th 1796
.225 Expenses 1796 - paid Sam. Sansome a Years Rent of his Country Seat on Schoolkill [sic]
May 24th 1796
.238 Cuthbert Landreth - paid him 21st 50
.215 Robert Morris Jun'r Dr to Cuthbert Landreth .238 for the balance due latter by the former p. acco't settled L 42.19.3 1/2 114.57
May 30th 1796
.89 Estate called the Hills - paid J. Ryans acco't for halling Dung &c
June 6th 1796
.225 Expenses 1796 - paid David Landreth bal'e his acc't to 19th March 155.18
June 20th 1796
.89 Estate called the Hills paid Strembeck painter amo't his acct L 9.8.7
.238 Cuthbert Landreth paid him 18th Inst't 50



August 8th 1796

.238 Cuthbert Landreth paid him 1st Inst't	50
Sept. 2nd 1796	
.238 Cuthbert Landreth paid him 2nd Inst	50
Dec. 3,1796	
for his Commission on Sale of Notes	300 187.50
Dec. 8th 1796	
.225 Expenses 1796 - paid Ross & Chapman for 150 but Coals for Hills @ 2/4paid C. Landreths order for halling Coals	46.67
.238 Cuthbert Landreth - paid him 25th Nov	100
.226 L. V. Ameringe paid him torwards a deposit of with H. Pratt	
Jan. 7th 1797	
.225 Expenses 1796 - paid for 2 loads of Dung halle	
.238 Cuthbert Landreth - paid him 3'd Inst't	40
Feb. 18th 1797	
.238 Cuthbert Landreth - paid him 4th Inst't	30
March 31st 1797	
.240 Sundry Accounts Dr to Nicholas King .89 Estate called the Hills for cost of Surveying Instruements [sic] Field Book &c of repairing	3.50 2 16 1



April 1st 1797

.238 Cuthbert Landreth - paid him 25th ult'o 50
[Handwriting changes at this point.]
July 30th 1797
.275 F. Gottreu Dr to Sundry Accounts .262 Expenses 1797 for Sundries Sold by him out of the Garden
.262 Expenses Dr to F. Gottreu for his wages from 30th Jan'y to 31st June
.262 Expenses 1797 June 5 paid hire of horse & cart & men moving 31.33
.233 Sundry Accounts Dr to Cash .275 F. Gottreu Gardener paid him 8th April \$ 30. " 22d ditto 30. " 2d May 20. " 18th ditto 30. " 29th ditto 50. " 10th June 20. 180
.271 Sundry Accounts Dr to Henry Holdship .188 David Allison for amo't of sundry carpenters work done by said Holdship to the house I now occupy which said Allison agreed to allow out of the rent of said House L 1411810 387.51 .262 Expenses for sundry work done to House in Town and at the Hills amounting to L 40148
Oct. 9th 1797
.262 Expences - paid J. Donnelly Gardener bal'ce of Wages \$10 - paid W'm Read



.275 F. Gottreu (Gardener) p'd his orders to Donnelly John \$10, Reed \$10.75	\$10, 30.75 37
.238 Cuthbert Landreth - paid him 22d July 20paid his order to Donnelly 26	46.00
.238 Cuthbert Landreth Dr to Robert Morris J'r .215 for the former's order on the latter p'd by him at Morrisville	33.50
Nov. 25th 1797	
.238 Cuthbert Landreth paid him the 23d October279 James Donnelly Gardoner [sic] paid him for Fruit	5 30 Trees 5 10
December 27th 1797	
.262 Expenses 1797 - paid R M [?] G.C. at Hills	25
.262 Expenses paid me [?] G. C. at the Hills 11th Oct'o	00
March 7, 1798	
.89 Estate called the Hills Dr to Richard Peters for a quantity of brown stone had of him many years ago estimated at	93.33
[Handwriting Changes: next entry dated March 31st 17	0.01

May 19th 1798

.232

Sundry Accounts Dr. to Cash Charles Blain paid him for Jobbs [sic] at The Hills 6-.241



May 22nd 1798

.262 Expenses 1797 Dr to Charles Blain for small Jobbs at the Hills last Fall
June 11th 1798
.89 Estate called the Hills Dr to Jacob Burket for Fencing
June 13th 1798
.89 Estate called the Hills for examining Titles, drawing Mortgage &c for the Pennsylvania Insurance Comp'y 30
August the 20th 1798
.60 Sundry Accounts Dr to George Ludlam (Plumber) .89 Estate called the Hills for his bill for glass. Lead &c in 1793 L 17.19.0 47.85
.89 Estate called the Hills Dr to Cromwell & Glenn for putting up Stove &c
Aug. 28th 1798
.238 Cuthbert Landreth Dr to Sundry Accounts .89 Estate the Hills for Sundries sold by him from the Garden p. Acco't L 93.152 1/2is 248.70 for Amo't of Sundries bo't by D'd Landreth from Green House
.89 Estate the Hills Dr. to Cuthbert Landreth for what he p'd Labourers &c
Sept. the 1st 1798
.233 Sundry Accounts Dr to Cash .89 Estate the Hills paid Jn'o Stock for Glass & Glazing there



	amesake
	April 22, 1799
N 1	89 Estate on Schuylkill (the Hills) Dr. to James Donnelly 279 for amo't of his payments p. acco't from July 1797 to ov'r 1798
р	279 James Donnelly Dr. to Sundry Accounts 89 Estate on Schuylkill for Amo't he received for Trees, 1 ants &c he sold
.2	May the 8th 1799 132 Robert Morris Jun'r Dr to Sundry Accounts 238 Cuthbert Landreth for the bal'e of his acco't iscounted with D. Landreth
	October the 1st 1799
	219 Jasper Moylan Dr to Estate the Hills for rent due on is lease as settled with him
	Aug'st 25th 1799
. 8	204 Cash Dr to Sundry Accounts 89 Estate the Hills rec'd of Henry Pratt the 9 May 1799 or the Greenhouse plants



⁴ Philadelphia, March 4, 1799. By virtue of a Writ of evari Facias to me directed, will be fold at Public Vende, at the Merchants Coffee-house,

On FRIDAY, the 15th of March inft.

At k o'clock in the evening,

A LL those Eleven adjoining backs. Pieces or Parcels of Lind. Struste, lying and being so the Northero Liberties, in thecounty of Philadelphia, in the commonwealth aforefaid, containing in the whole 140 acres ad 97 perches; which faul eleven Tracks, Pieces or Parcels of Land, are parts of a large Track I Land, called the Vineyard, whereof a draft or plan is recorded in the office for recording officeds in and for the city and county of Philadelphia, in Biold I. No. 7, page 3577; in which Laddraft or plan the aforefaid eleven I racks are marked with the following numbers, to wit, so, 21, 24, 19, 24, 18, 25, 23, 28, 29 and 26, and the fame were granted and conveyed by the pefons here in the reason to the faid Robert Morris, to be fample, in the following manuers, is win-Tracks No. 20 and 21. Containing together 44 series and 141. ed in the office for recording offeeds in and for the city and county of Philadelphia, in Book I. No. 7, page 357; in which lad leaft or plan the alureful eleven I rache are marked with the following combers, to wit, 80, 21, 81, 93, 41, 18, 25, 33, 28, 29 and 26, and the fame were granted and conveyed by the perfone berein after named in the fall Robert Morras, to be fimple, in the following manuer, in wit—Tracts No. 20 and 21, continuing together 44 acres and 141 perches, by Tench Francia and Ann lits wife, by Indentitue under their hands and feal duly executed, bearing date the 17th day of July, 1770, and recorded in the office aforefuld, to Book I. vol. 7, page 350, dec.—Tract Bo 22, containing together as acres and 140 perches, by the fast Tench Francia and Ann his wife, by Indentitue under their hands and feals duly executed, alfo bearing date the 17th day of July, 1770, and recorded in the office aforefuld, in Book I. vol. 7, page 148, dec.—Tracts No. 19 and 20 containing together 20 acres and 155 perches, by William Smah and Elusbeth has wife, by Indentitue under their hands and feals duly executed, bearing date the 17th day of July, 1770, and recorded in the office aforefuld, in Book I. vol. 7, page 148, dec.—Tracts but "execute under their hands and feals duly executed, bearing date the 18th day of October, 1776—Tracts but 25, containing 18 acres and 124 perches, by the fast Tench Francis and Ann his wife, by Indentitue under their hands and feals duly executed, bearing date the 18th day of October, 1776—Tracts but 25, containing 7 acres and 153 perches, by John Stanibury and Sarah his wife, by Indentitue under their hands and feals duly executed, bearing date the 24th Vol. 30, 200, and 400 his wife, by Indentitue under their hands and feals duly executed, bearing date the 24th Vol. 30, and 30 and 400 his and 400 received hearing date their lands and feals duly executed his acres and 62 perches, by July and teorded in the office aforefuld, in Deed Book, No. 9, page 20, dec.—All and the page 18th and an

- Seized and taken in execusion as the property of Rubert Morns.

LL that Trad, Piece of the state of the widow Harrison; these by the fane land being in the Northern Liberties aforefaul—spinning at a sub-four oat, by the tirer schuptalli, at the corner of land late of Mathias Afpdes, afterwards of the widow Harrison; these by the fane land north cad express and an half, ead 284 perches, to a flake by the fide of Willathekon road, thence by the fane from flowth of the degree, rad if a perches and an half, to a flath at the corner of land late of Ofweld Peel, afterward of Andrew Doz, thence partly by the fine and partly by obei land notice that the state of the fale of the fast road; more extending along the tame north 43 degrees 30 minutes, well 25 perchas and 7 tentls, to the place of Leginning, containing affacres 3 quantum, and to perches of land; which Tract was b Ofwidi Peel, the former owner thereof, charged with the right of Jacob Dubree and his best to have a road or cart-way of so feet wale one part of the fante, to cate of from his the fandacob Dubree's land to the Willabyckon mod eforefact; the right to

Jacob Dubree and his beit to have a road or cart-way or to text was over part of the tame, to cate of from his the find acob Dubree's land to the Willahyckon road eforefaid; the right to which faid to foot cart-with End Rubert Morris, purchifer unlet the faid Jacob Dubree, by Indenture duly execused, earing date the 30th day of November, 4774, granted and released unto Andrew Doz. Als

Als that Proce of Lin likewife fituate, lying and being in the Northero Liberties aforefaid—beginning at a poft in thise of the Traft last above deferibed, and a corner of George Gotfried Whelpper's land; then be the thing the fair footh 37 degrees, east 8 perches and a half, so a post, another corner of the faw helpper's land, thence both 4 degrees and an half, east along the westerly fide of a fifty froud 3 perches and 6 fost, to a post, a corner of the faid Whitman's land; thence by the fainth 67 degrees, west 49 perches and 7 feet, to 8 post, a corner of the last Whitman's land; thence by the faint north 53 degrees, east 49 perches, in the place of beginning—containing acre and a half and 36 perches of Land; which two last defertibed Tracks of Land Andrews and Rebectes his wife, by Judentie under their hands and feals duly executed, bearing date a 5th day of May, 1782, recorded in the office aforefaid, in Deed Book, No. 4, page 4 per grained and conveyed unto the faid Robert Morris, in fee simple.

Seized and taken injution as the property of Robert Morris and Mary his wife, and fold by JONATHAN PRNROSE, Sherist,

Printed D. HUMPHREYS, No. 481 Spruce-flreet.]-



Wir

for A be Allister

379

CATALOGUE

OP

SPLENDID AND RARE

GREEN HOUSE AND HOT HOUSE PLANTS.

TO BE SOLD BY AUCTION,

AT

LEMON HELL, Sentine

FORMERLY THE SEAT OF THE LATE HENRY PRATT, DECEASED,

ои

TUESDAY, THE 5TH DAY OF JUNE, 1838,

AND TO BE CONTINUED DAILY TILL COMPLETED,

BY D. & C. A. HILL,

AUCTIONEERS.



CATALOGUE.

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BOTANIC NAMES

ENGLISH NAMES

White Madagasear Perrywiplic Myrtle Leaved Rose Apple Superb, Flowered Bramble Rose Marine Squill

Great American Aloe Persian Cyclamen Tolira

Polyanthus
Three Styled Flax
Gold blotched Aucuba Americas Aloe Porcupine

Domestic Nandina Persian Cyclamen African Lilly

White Flowering Common Myrtle Variegated Holl Madeira Olive

Myrius Communia

Oles Maderiensia Rhus Alaterais llex Ferox

Hedgehog Holly

Alaternia Like

Ajuga Orientale Artemesia Sp

Agave Var. Variegala Prunia laurua cerassia Artemisia Argentes Coronilla Glauca Picus Australia

Silvery Wormwood

Laurel Bay Southers

Striped Leaved

Striped Leaved American Aloe Marioe Squill

Yellow Coronille

Antholyza Ethiopica Var Variegata Americana

lubus Rosoefolius Marica Chioconia

Jambosa Australis Arctotus Superba Scilla Maritima

Pittosporum Tobira Vinca Rosea Alba Rubus Rose folius

Cyrlamen Persicum Agave Americans

Agave Americans Citrus Histrix

'rimula Veria

Linum Trigynum Aucuba Japonica

Sale to commence each day precisely at 10 o'clock, and continue till

TERMS.

proved endorsed notes, at four months. Bills to be settled at the Auc-3 o'clock. For all sums uoder \$200, cash; all sums above \$200, ap-

同時時間開發

tion Store, No. 95 Walnut street, before delivery of the Plants.

Agapanthus Umbellatus Cyclamen Persicum

Hea Folius Variegatua Nandina Domestica Diosma Alba

D. & C. A. HILL, Auctioneers.

Americana

Eries Mediterrages

Santolina Tomentosa

Mediterranean Heath . . . : Bramble Rose Chinese



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MES

BOTANIC NAMES

ENGLISH NAME

Hypericum leaved

Melaleuca Hypericifolia BOTANIC NAME

Scilla Maritima

rimula Veria

걸

Marine Squill

Polyaothus

Nerium Oleander Alba Lioum Trigyoum

Melateuca Hypericifolia Centrium Marum

Mediterranean Heath

Linum Trigyoum Salvia Fulgens

Fine Finwering Sage Iwarf sweet scented

Aypericum Leaved

Three Styled Flax

Cat Thyme

Three Siyled Flax

Magnolia Pumila

Agapanthus Umbellatus Eriobotrys Japonics

Small leaved myrtle

Myrtus Mucronsta

Hermania Sp

Corres Alba

Communia

Eucomis Punclata Phormium Teorx

Common

Dotted Jotted

White Flowering

. Cohira

Teucrum Sp. Pittosporum Tobira Prica Mediterracea

New Zealand Flax

Erica Mediterranea Freus Nilida

Mediterranean Heath

African Lilly

Janes Loguel

Shining Leaved Fig.

Hakes Suzveolens

Verium Splendens usticia Adhatoda Justices Adhatoda

Pirce Styled Flax

Japan Lilly

lemerocallis Japonica

Eucomia Punciala

Maiden Hair Tree

Three Styled Flax

Poly anthus

White Flawering

burnum Variegatum Artemesia Sp

Varicgated Lauristinus

Gold Bletched Aucuba

Jouble l'Inwering

Mediterranean Heath

Shiniog Leaved Privet

Double Oleander Sweet Smelling

Rush Leaved Genista

Myrtus Multiplex Aucuba Japonira

Erica Mediterranea 60

Diosma Alba

Cistus Roseus

Agapanthus Umbellatus Lubus Rosarfolius Erica Caffra

Carolina Candleberry Myrtle Double Flowering Oleander

Fine Flowering Sage

Ethiopean Lilly

Wine Flowering

African Lily

Rosc, colored

Azelea Indica Alba Agave Americana

Antholyza Æthiopica

Melaleuca Hypericifolia Santolina Tomentosa Libum Trigraum

Hypericum Leaved

Three Styled Flax

White Flowering

American Albe Branble Rose

> Teuerium Frutiscosum Jinum Trigynam Geniala Ep

Azales Indica Alba uchsia Coccinea Lotus Jacobæus

Dark Flowering Lotus

White Flowering

Scarlet Ear Drop

Three Styled Flax

Agave Var Variegata Geisinium Nilidum

Eupatorium Elegana p. Tropwolum Majus Fl Pl Geranium Hederifelium Salvia Coccinea

Double Flowering Nasturtium

Stripe Leaved Aloe

Carolina Jasmine

Scarlet Flowering Sage .

Hermania Sp ... i ... u!! Erica Caffra

Elegant Flowering lvy Leaved . . .

Account the second

White Flowering .

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159

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Salisburia Adiantifulia Libum Triggoum Diosma Alba Laurus Sp 53 56

1 4 70 -

Orange Leaved Myrile Lioum Trigyoum 'rımula Veris 59

9

Hibbertia Volubilis Dododinia Sp Correa Alba 3 62

Twisting Hibbertia

White Flowering

Gigantte Echium Gigantie Echium

Echium Giganteum

Echium Giganteum Nerium Splendens 65

Myrica Caroliniconis Salvia Fulgeos 67

Calla Æthiopica 68 69

ris Chipenais vi Primula Veris 2

Magnolia Pumila

Dwarf Sweet Scented

Chinese Iris

Poly anthus

White Flowering

Azales Indics Albs

Agapanthus Umbellatus uchsia Gracilia Ceriesa Fætida

Verium Oleander Alba Nandina Domestica Centrium Marum

Domestic Nandius

Slender Fuchsia

Cat Thyme

African Lilly

White Flowering White Flowering

> Nerium Olcander Alba Antholyza Æthiopica Ceucrium Marum

Srica Mediterranea Sistua Salvifolius Phlomis Fruticosa

Nerium Splendens Rubus Roscefolier

Mediterraneso Heath

Cat Thyore

Sage leaved Rock Rose Double Oleander Bramble Rose



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Linum Trigynum Agepsethus Umbellatus

Viburoum Tinum Pronis Arbores Myrica Sp

Agave var Variegala Artemesia Argentes Viburnum Tinus Smilex Sp

Tropzolum Majus Fl. Pl: Agare var Variegated Erica Mediterranea 203

Salvia Fulgens 206 504

Agave Americans 207

Viburoum Lucidum inus Longifolia 208

Nerium Splendens Tinus uces Albefolia 212

Halleris Lucida Arales Indica

Geranium Bederifolium Calla Æthiopica

Eranthimum Pulchellum Orange leaved Myrde Myrtus Multiplex 820

Melaleuca Ericifolia Erica Mediterranes Myrtus Communis

Mediterranean Heath

Wall Flower

Africen

Iscobs Lily

Common Myrde

Heath Leaved

Double Flowering

Amaryllis Formosiasima Spermania Africaos Cherianthus Cheri iburnum Tious

Hibiscus Rosa Sinepais Supstorium Elegens Yurca Aloefolia

Shioing Leaved Privet Aloe Leaved Lauristipus Elegant Double Crowo Hedychium Coronarium

Rhododendron Hybridum 189 - Perius Longifolies

Three Styled Flax

Hybrid

African Lilly

Jong leaved

Lauristinus

Melianthus Major

ô ခု ę

Striped Leaved Aloe

Laurustinds

þ

Cape Honey Flower Silvery Wormwood

Tree Parony

Ceratonia Siliqua ę 000

Ismbos a Australis

Striped Leaved Aloe Mediterranean Heath

Fine Flowcring American Aloc

Double Flowering

St. John's Bread

svenduls Dentsta

Long leaved Pine

Foothed Lavender

Double Olea oder

Lauristinus

Aloe Leaved

Shining

Shining leaved

Aloe leaved

Ethiopisn Lilly

vy Leaved

Beautiful

Red Floweridg

Ligustrum Lucidum

ENGLISH NAMES

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Three Styled Flox Waved leaved

Mediterranean Heath Stripe leaved Aloe

Double Flowering Myrtle Smaller Honey Flower Mediterranean Heath Elegant Flowering Gigantic Echium

Yellow Flowering Shining leaved Red Flowered

Myrile leaved Rose Apple Silvery Wormwood Double Flowering Long leaved Pine Gigsntic Echium Rush leaved

My rile leaved Rose Apple Sage leaved Rock Rosc Aloe leaved Yucca Tiee Parony A fricab

Aloe leaved Yucca Mrdian Lemon Sur Anisced llicium Anisatum Parviflorum

Fine Flowering Stripe leaved Aloe Double Flowering Bramble Rose Aloe leaved

Aloe leaved

Double Flowering

Tobira

Double Flowering

ropzolum Majus FI Pi Tropzolum Majus Fl Pl Agave Var Variegata Pattosporum Tabire ucre Aloefolia ucca Aloefolia

Tropmolum Majus Fl Pl Small Lemon Stock Rubus Roscefolius Rivinia Humilia Salvia Fulgene 8

BOTANIC NAMES

Erica Mediterranea Linum Trigypoom Mahernia Sp

Mediterranean Heath

Three Styled Flax

Jitosporum Undulatum Antholyes Ethiopies inum Triggnum

\$

Agave Var Variegata Erics Mediterranes ခို 3, 43

Myrtus Moluplex Melianthus Minor Smilex Sp

Is-minum Atoreacum Eupatorium Elegaos Echium Gigenteum Erics Mediterranes 50 48 43

153 164

Illicium Floridununi Spermania Africana Nerium Splendens Halleria Lucidum Genista Junces 156 155 157

158

Jambosa Vulgaria Echium Giganteum Artemesia Argentea 62

Pinus Lungifolius Jambosa Australis Cistus Salvifolius Myrics Sp 163 9

Antholyza Æthiopiea permania Africans Ucca Aloefolia mennia Arborea Citrus Medics q 65

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THE PARTY OF THE P

Yucca Alvefolia



NAMES	
ENGLISH NAMES	Superb Flowering

6

	Superb Flowering	Sweet Scented	Common Myrile	Alaternia like Monter Monter	Purple Dragon Tree	Elegant	Monkey Flower
BOTANIC NAMES	Arctotis Soperba	Marica Chinenaia	Thunbergia Fragrada	Rhus Alaternia	Migulus Smithii	Rubus Roscefolius Funatorium Elegans	Cistus Salvifolius

Ameryllis Johnsoni Mimulus Smithin 663 292 \$88 997 291 287 286 964

Myrtus Mucronala 294

Liptospermum Bacealum llicium Floridanom Myrtus Mucronata Rubus Rosafolius 968

Small leaved Myrile

Bramble Rose

Small leaved

Johnson's

Double Olcander

Bramble Rose

Nerium Splendens Genista sp

Strelitria Regina 903

Potentilla Napalensia Rubus Rosa folius Nerium Oleander 305

Euphorbia Poinsetta Cratargus Glabra Dodinia sp 306 307

Purple Dragon Tree

Smooth leaved Mr Poinsett's

Shioing leaved

Dracana Ferres 308

Myrica ap 312

Antholyza Æthiopica Halleria Lucidum 313

Amaryllis Johnsoni Justicia Adhatoda Justicia Speciosa 315 316 317 314

Monkey Flower Stripe leaved

Showy.

ohnsun's

Metrosideros Saligna Dracena Terminalis Mimulus Smithii 319 318 320

Sansiveria Guineensis Aspidium Esaltalum Coffee 361 322 353

Mediterrancan Heath

Johnson's

324 \$25

Ameryllis Formosissims Ameryllis Johnsoni Cineraria Cruenta

Bloody leaved

Blue

Marica Corules

Erica Mediterrabea

ENGLISH NAMES

Lauristions

Long Leaved

Mango Tree Mastic Tree

Three otyled Flax Japan Loquat

Shining Leaved Fig. Three styled Flax Double Oleander Rush leaved Dotted

Hill Banksia

Peruvian Squill

Double Oleander

Twisting Hibbertia Mastic Tree White Flowering ew Tree

Toothed Lavender John son's op

Rough

Double Oleander

Rush leaved Broom Domestic Nandina White Flowering Double Flowering St John's Bread Crenulate leaved

Mediterranean Heath Æthiopian Lily Smooth leaved Lauristious

Elegant

Sage beaved Rock Rose Bramble Rose Rush leaved

BOTANIC NAMES

iburnum Tinus V. Hibiscus Rosa Sinensia Hibiseus Ross Sinensis Antholyza Æthiopica Pions Longifolius

Mangifera Indica Linum Triggnum Schinus Mollis 235 236 237

Hibiscus Ross Sinensis Eriobotrya Japonica 240

Sucomis Punctata Nerium Spleadens Linum Trigyoum Genista Juncea

Scills Peruviana Baoksis Collina Ficus Nitide 249

Nerium Splendens 252

Hibbertia Volubilia 254

Schinus Mollis Diosma Alba PANUS BD 257

Ameryllis Johnsoni Lavendula Dentata 0 259 561 258 260

Nerium Splendens . . Cratacgus Indica Caurus Rugosa 263 P 64

Nandina Domestica Spartium Junceum Acales Indica Alba Laurus sp 592 998 267

ropeolum Majus Fl P Ceratonia Siliqua 269

Erica Mediterranee Ardisia Creoulate Calla Ætbiopica Crataegus Glabra

Rubus Roscefolius Cistus Salvifolius Eupsterium Elegens Viburnum Tinus Geoista Jonces

Potentilla Nepalensia



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BOTANIC NAMES	ENGLISH NAMES		BOTANIC NAMES	ENGLISH NAMES
Crassula Alba	White	377	Plumbago Alba	White
Burebellia Capensis	Cape Burchellia .		Cestrum Parquii	Night Smelling
Eupatorium Fragrans	Weel Scented	620	Hibiscue Rosa Sinensis	Double
Calla Atmospher	Blue		Iris Suvisna	Fleur-de-Luce
Rubus Roscefolius	Bramble Rose	362	rolum Majus F	Flo
Dodinia Sp	•		de do do	op op
Justicia Speciosa	Showy		Eschebolizia Californica	, self I sodow I
Amaryllis Johnsoni	Johnsons	S 20	Amary itts Folimosissuma	Brown Colled Seven
Marica Chinensis	ō	367	Tradescapita Sp	Blue Flowering
Justicia Speniosa	Showy Double Oleander	356	Hibiscus Rosa Sinensis	Double
Newdisc Demestics	Domestic Nandina	389	Geranium Tristrum	
Albuca Alussima	Tall Albuca	390	do do	:
Justicia Speciosa	Showy	391	Alstromeria Psittacina	Parrot Like
Amaryllis Formocissima	Jacobea Lily	305	Yucca Aloelolis	Aloc feaved
Jasminum Sambsc	Arabian Jasmine	293	Amaryllis Formosissims	Jacobea Lity
5 Coronella Glauca	Yellow Coronella	700	A Var Varients	Series Issued
7 Mimulus Cardinalis	Scarlet Flowering	1	Man Paradiciaca	Bonapa
Erica Mediterranea	Mediterranean Healti	397	Tradescantia Sp	Blue Flowering
Ξ	Stripe Leaved	868	Hibiscus Sp	0
do do	-	389	Agore Var Variegals	Striped Aloe
A Agreeme Verginishm	Trainian (00	Amaryllis Johnsoni	Johnson's
3 Descripe Terminalis	Stringd Dragon Tree	401	Formosiasima	Jacobea Lilly
4 Apparatilis Johnsoni	Johnsons	405		i
5 Hibiscus Rosa Sincusis	Double	403	Tropacolum Majus Fl I'l	Double Flowering
6 Rhus Alaternis	Alaternis Like	404	Nersum Splendens	Double Oleander
7 Amaryllis Johnsoni	Johnsons	7.	Liplospermum Sp	Patrices Control
6 Hibiscus Rosa Sinensis	Double	400	Liphocogramm Sp	naulaic jaaws
9 Amaryllis		408	Nerium Splendens	Double Oleander
O Arsha Flornecia	Transport The	409	Amaryllis Formosiesima	Jacobea Lilly
Manufactorium	Muchey Florer	410	Correa Alba	White Flowering
3 Mimora Sp		\$	Tabernæmontana Coronaria	Double Flowered
4 Hebiscus Rosa Sinensis	Double	4 4	Pancratium Sp.	African
5 Cestrum Laurifolium	Laurel leared	4 4	Jasminum Grandiflorum	Sweet Scented
6 Amaryllis Formociasima	Jacobea Lily	415	Crinum Amabile	Splendid Flowering
I relion rose		416	Olea Europæus	European Olive
o Freshina Polcheller	1\eartiful	417	Justicia Caletrix	Yellow Flowering
O Linum Trigynum	Three Styled Flox	418	Hibiacus Rosa Sinensis	Double
1 Iris Variegala	Stripe leaved	4 4	Dodinia Sp Frankring Crists Call:	Coxcomb Coral Tree
2 Calla Æthioples	Æthiopian Lily Double	- T	Acacia Cophaetha	Crest Flowered
14 Jasmioum Sambac	Arabian Jasmine	428	Eupatorium?	11/
5 Arales Sp		423	Mimosa Sp	Showy
16 Cesalpinia Cueulata	-	<u>,</u>	Justicia opeciosa	-

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BOTANIC NAMES

Kodding Flowering

Creeping Fig

Fieus Repeos Hedychium Coronarium Globba Nutans

Cesalpinia Sp Crinum Sp

Yellow Trumpet Vine

Common Daily Rose

White Daily Rosc

Sanguinea Rose

Daily Rose

Sanguinea Rosc Daily Rosc

Belle Choinesc . Daily Rose Sanguinea Rose

Rosa Hamilton Moothly Mimosa Sp Solanum Sp Bigooois Stans

Sauguinea

do White Daily Daily Rose White Daily do

White Daily Rose

rellow Tea Rose

Sanguines do Daily Rose

Rosa Pumilla Daily Rose

Yellow Tea Rose

Granville Rose Daily Rose

White Daily Rose Seoguines do "White Daily do

do do Yellow Tea Rose



Daily Rose

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551 do 582 Daily Rose

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White Daily Rose
Sanguines Rose
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Daily Rose
White Tea Rose
Daily Rose
                     White Daily Rose
Bush Tea Rose
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Sanguines Rose
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Yellow Tea Rose
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Daily Rose
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Yellow Tea
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Sanguinea Rose White Daily Rose Yellow Tea Rose

White Daily Rose Daily Rose

Daily Rose Yellow Tea Rose White Daily

Sanguinea Rose Daily Rose White Daily

White Daily

601 608 604 605 605 606 607 609

White Daily

611

Daily Rosc

Vellow Tea Rose

Ross Pumila

597 598 599 600



Ethiopian Lily

Rose Apple

Mesembryanthi mum Ismboss Vulgaria Bixa Orrelana

668 669 670 671

ENGLISH NAMES

BOTANIC NAMES

Microphylla Rose Daily Rose

Daily Rose

Dwarf Cape Jasmine

Two Coloured

Sansiveria Guineensis?

Gardenia Radicans

627 979 689 630 632 633 634 635 969 637 638

Tradescantia Biscolor

Antholyza Æthiopica

Sanguines Rose

Jaily Rose)aily Rose

Sanguines Rose

622

ĝ.

Coscomb Coral Tree Scarlet Flowering Mr Poinsett's

Erythrina Crista Galli

Ruellia Formosa

Euphorbia Poinsettia Euphorbia Poinsettia

usticia Speciosa

Euphorbia Poinsettia

631

Jacquinora Princeps

Mr Poinsctt's Mr Poinsett's Showy

Coxcomb Coral Tree Porple Dragon Tree Yellow Flowering

Caccalua 2p Erythrina Crista Galli

639

Justicia Caletrix

641 643

Cacalia sp

Didymocarpus Rhesii

Discens Ferres

Blue Flowcring ndian Rubber Heart Shaped Parrot like Zebra like

Alstromeria Psittacina

645

Lobelia Cærulea

Calathea Zebrina

647

ieus Elastica

Arum Cordstum Calla Æthiopica

> 649 650

Ethiopian Lilly Southern

Hedychium Coronarium

irus Australis

Didymocarpus Rhexii Erythrina Crista Galli Erythrina Crista Galli

Jobelia Coerulea

651 652 653 654 655 656 656

Marica Corrulea

Vinca Rosea Rubra

Madagascar Perrywinkle warf Cape Jasmine Coxcomb Coral Tree Coxcomb Coral Tree Cape Didymocarpus Tellow Flowering Blue Flowering Blue

Scarlet Flowering Parrot like

Alstromæria Radicans

Gardenia Radicans

Justicia Caletrix

Didymocarpus Rhexii

Justicia Coccinea

Cacalia

661 662 663 664

Heliotropium Peruvianum Hibiscus Rosa Sinenais Didymocarpus Rexii Ruellia Anisaphylla Passiflora Prioceps Justicia Speciosa Calathea Bicolor Cantua Coccinea

Peruvisa Turnsole Double Flowering Arabian Jasmine Blue Flowering Sweet Scented Two Colored Cassia Plant Southern Spotted Scarlet

Hibiseus Rosa Sincosis

Begonia Maculata

698 699 700 700 700 700 700 700 710 710

Jasminum Sambac

Ficus Australia

Lsurus Cassia

Plumeria Alba

Splendid Sage Worshipful Poplar leaved

Large Crowned

Heliotropiam Peruvianum Trapzolum Majus Fl Pl

Lagra Coccinea

693 694 695 696

Tradescaplia

Beolor

597

uchsia Macrostemma

ieus Religiosa .

Salvia Splendens

Scarlet Flowering

Platanus leaved

Cineraria Platanifolia

556 587 558 558 559 590 691

Justicia Coccinea

Madagascar Perrywinkle

Ethiopian Lilly

Parrot Like

Alstromeria Paittaeina

Calla Æthiopica

561 582 583 554 564

Euphorbia Poinsettia

Sardenia Radicaos

Mescmbryanthimum

Pancratium Sp

676 679 679 679

Fuehsia Macrostemma

Vinca Rovea Vinca Rosea

Dnarf Cape Jasmine

Poinsette's

Cape Trumpet Vine

Bignonia Capenais

675

Calla Æthiopica

lumeria Alba

Strelitaia Regica Ruellia Formosa

Creeping Arabian Jasmine Ethiopian Lilly

Asparagua Scandena

Calls Æthiopics

Isaminum Sambac

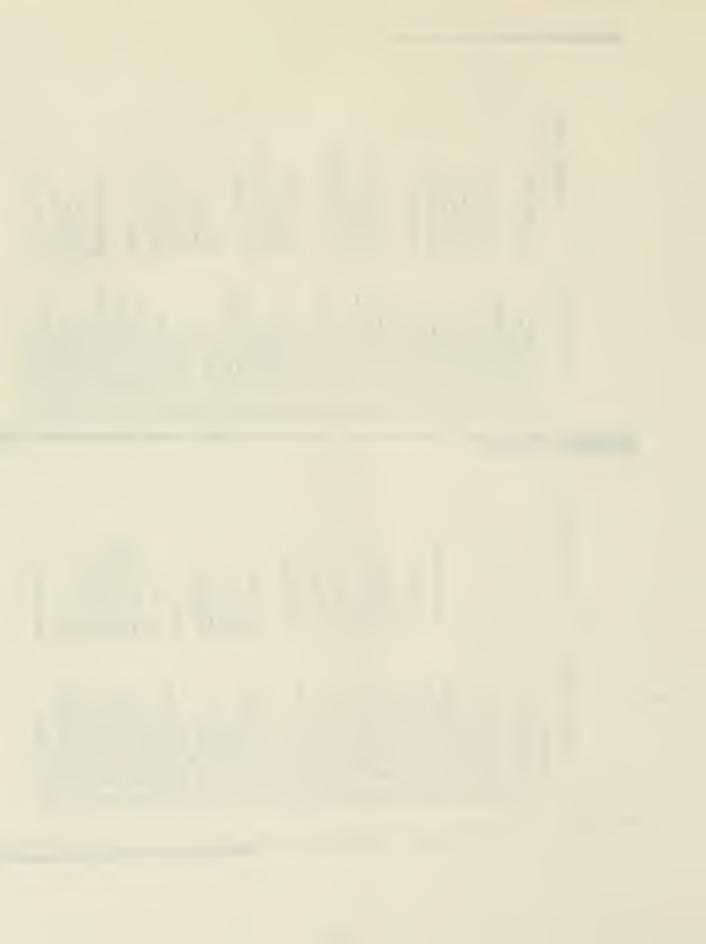
Sweet Scented

Ethiopian Lilly

Scarlet Flowering

Showy Two Colored Passion Vine

Cape Yellow Flowering Scarlet Captua



	ENGLISH : NAMES	Banana	White Flowering			Æthlopian Lilly?	Beautiful	Striped leaved Dragon Tree	Wing Passion Vine	Showy	Lady Tankerville's	Double Flowered		Coxcomb Coral Tree		Can let Plantaine	Sulfanoi I Initao	Crepulate leaved	Crown		i	Free Flowering	Yellow Flowering		Double Flowered		Madagascar Perriwickle	Scarlet Flowering	Fine Blooming		Sweet Scented	Arabian Jasmine	Free Blooming	Madagacar Perrywinkle		Monkey Florier	in the second se		Crown	Scarlet Flowered	Ethiopies Lilly	Free Blooming	
	BOTANIC NAMES	-,	762 Tradescable 763 Justicia Alba	764 Mimose		_	765 Eranthimum Pulchellum	-		_		773 Tabernæmontana Coronaria			•		71/ Ruellia Formosa	770 A desir Countils			762 Sansiveria Zey lanica	_		•	707 Tehernamontana Coronaria		788 Vinca Roses	789 Justicia Coccinea	790 Passiflora Princeps		793 Plumeria Alba	·		•			Roo Hattice Negis		808 Hedychium Coronaria : 1.		804 Passiflors Frinceps		
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			-	٠.		-			_	_	_				1	_		_		_	7			^	-		_	_		٠,		11	ru	; ;	4 6-1	- 1984				ET.	
24	ENGLISH WAME		. :				oth Like	opico Lilly	Crowned	does Gooseberry		Tankerville's	Passion Vine	1,20	opien Lilly	00 0	illooming.	~ "i	omb Coral Tree	so do	do do	iful		Shade Leaved	Blooming	late leaved	>	. loji	rian Turneol	Coloured	100,4	le Dragon Tree		et Flowering	, af	Blooming	el Ondra	Blooming	iopian Lilly	ulate leaved	omb Coral Time	inth like	
		nalia Stripe leaved	res Purple Dragon Tree .v.	Vince Rosca Madagnacar Perrywinkle	Dracena Terminalla Strine leaved	Two Colored			emme	Cactus Pereskin Barbadoes Gooseberry	-	=		onii	thiopica Ætheopian	op op op op op	Clearing Carries Charter Charter		ta Galli		op	Eranthimum Pulchellum Beautiful		Ardisia Solanacea Night Shade Leaved	Passiflore Princens Free Blooming		ciosum		ruvianun	Unificial Consists Control Control	iiac	Discount Ferres : Purple Dragon Tree		,		Free Blooming France ps Free Blooming Free Blooming					Erythrias Crista Galli 24 Concomb Cord Time 2 1 1 1	• î	



	BOTANIC NAMES	ENGLISH NAMES	•	BOTANIC NAMES Pro-	ENGLISH
		-	864	Bletia Hyacinthina	Hyacinth Like
807	Justicia Caletrix	Flowering	855	D.J. monography Photois	Cape Didimocal
200	Coccional Control		000		do
200		Description	858	3 -6	qo qo
-	Vince Roses	Percentiable	8.00	ę	do do
010	Inchicia Cocciona		960	3 -6	do do
1 6	Tradescentie Bicolor	SCHIEF FIOMERCA	198		do de
2 2	Sancireria Guineeresia	ı	868	Π	Stripe lesved
	Ardisis Consilete	Creambale learned	500		Peruvian Turos
218	Taurus Cassis	Cretinate reven	864		M Poinsette's
2 10	Lucticia Calefria	Vellow Plomering	5,95		
918		Simpant world	200	Crassula Alba	
9 14			567		Cape Didimoca
820	Hedychium Cornnaria	Crown	808		
891	Eranthimum Parlehellum	Resultin	869		qo op
000	Regonia Maculata	Spotted loaned	670		do do
1 00	Designation Drings	Erec District	673	Drawn Termin	Stripe leaved
2 2 2	Designation of the contraction o	gamooming.	670		Cape Didimoca
670	Passidora Frinceps	Free Blooming	3 6		op op
222	Begonia Maculata	Spoiled leaved	2.8	9 -	op op
938	Justicia Coccidia	Scarlet Flowered	574	9 :	et Flor
827	Splendens		875	•	Cane Didimora
828	Ruellia Formosa	Scarlet Flowered	876		
829	Erythrina Criste Galli	Coxcomb Corall Tree	877		
630	Passiflora Princeps	Free Blooming	878	_	Coming langed
631	Alstromæria Psittacina	Parrot Like	879	_	Competence
632	Marica Northiana	Yellow	680		Crowo
833	Sansiveria Guiocensia		1881		
834	Alstromeria Paittacioa	Parrot Like	882		7
835	Didyonocarpus Rhexii	Cape Didimocarpus	683		Spotted Jenved
836	Captus Coccines	Scarlet Cantua	884		Showy
637	Justicia Caletria	Yellow Flowered	855	Ficus Nitide	Spining icave
638	Myilus Tomenton	Woolley	886		
689	Mesembrysothimum	•	887	•	Danie Marca
640	Tabernæmontana '		888		Wine Passion
643			889	•	Poplar leaved
842	Saosiveria Guineensis		890	_	Woolv Myrtle
2	Crassula		169		
4 4	Dracent Terminalia	Stripe leaved	898		Spotted
2 2	Cantua Coccinea	Scarlet Cantus	893	•	Scarlet
9 1	Marica Corules	Blue	894	_ '	Dark Flowering
7 1 2	Didymocarpus Khexii	Cape Didimocarpus	895		Stripe leaved
070	T. Free Go	00 00	989	•	Madagascar Pe
200	Dide Corogania	Double Flowered	897		Spotted
121	do do do		20.00	Cloxinia Macual	. Madagueur Pe
852	Alstromeria Paittacina	Parent Like	8	Glorinia Maculata	
953	Calla Æthiopica	Athionia Lille	3 3		
			:	1	

Kaisa:

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BOTANIC NAMES

inglina Culti . S.

Madagascar Perrywinkle

Spotted

Gloxinia Masulata Glosinia Maculata

inca Rosea

913

Maries Northians

916 918 918 920 120 922 924 325 130

THE WAR THE BEST OF THE PROPERTY OF THE SECOND SEC

Yellow

Spotted Showy

abernæmontana Coronaria Fl PiDouble Flowered

Yellow

Mimulus Cardinalia

usticia Caletrix

Dwarf Cape Jasmine

Gardenia Radicans

Glosinia Speciosa

Ardisia Crenulata

usticia Caletrix Marica Corrules

Yellow Flowered Crenulate leaved

Frec Blooming

assiflora Princepa usticia Spleodena

Jrtica Nevia

Gloxinia Maculata

usticia Speciosa

Oraczos Ferres Cantua Coccinea

Blue

Spotted

Madagascar Perrywinkle

ellow Flowered

Showy Spotted

Stripe leaved

Dracena Terminalia

Gloxinia Maculata Gloxinia Maculata

inca Roses

600 016

908

20

uaticia Caletrix

Mecalita

Gloxinia Speciota

Ameryllia

Spotted Spotted

Arabian Jasmine Dwarf Cape Jasmine · Peruvian Tumaol · . 'Crenulete leaved . Yellow Flowered Scarlet Flowering Yellow Flowcred Yellow Flowered Free Blooming Creoulate leaved Scarlet Flowered Free Blooming Scarlet Flowered Arabisa Jesmine Striped leaved Two Colored Striped leaved Johnson's Mango Tree Showy Coffee Tree Coffee Trec Perrot like Yellow. Banana Showy Crown Ξ -Heliotropiam Peruvienum Hedychium Coronoria Cleriodendron Fragrans Hedychium Speciosum Jasminum Samber " Aletromerie Paettacine Aristolochia Hedychium Coronaria Ameryllis Johnsonii Sanseveria Guimeensia Tradescantia Discolor Oraczena Terminalis Crinum ap Dracena Terminalis Passiflora Princepa tuellia Anisophylla Gardenia Radicans Passiflora Priocepa Calathea Bicolor Ardisis Crepulats Muse Paradisaisce Gloginia Epeciosa Ardissa Crenulate Caberozmontana usticia Caletrix Labernz montana Marica Northians usticis Coccinea Justicia Caletrix Ruellia Formosa Justicia Caletrix Justicis Coccinis Mangifera Indica Cantua Coccinca Coffea Arabica Coffee Arabica Bixe Orrelane. Didymocarpus Urtica Nevia 866 986 988 988 989 989 990 980 952 953 979 196 975 916 970 971 **B73** 916 110 896 696 69 965 996 296 296 964 959 096

Madagascar Perrywinkle

Beautiful

Granthemum Pulchellum

930 932

931

929

Three styled Flax

Free Blooming

Five Flowering

Ivacinth like

Spotted

Passiflora Princeps Glozinia Maculata Bletia Hyaciothina

933 934 935 937

Sieum Trigyoum

incs Roses

Free Blooming Shiping leaved

Cruwo

Hedychium Coronaria

939 940

Glozinia Maculata

ices Nitida

usticia Splendena

Vines Roses

Ruellia Farmosa

Strelitzia Regioa Passidora Princepe

Salvia Fulgeos

935

Showy Purple Dragon Tree Scarlet Cantua

Madagascar Perry winkle

Double Tuacan Hyacinth like

Jasmioum Trifolistum

3

Glozinia Speciosa

Bletia Hyacinthina

ę

Showy

Scarlet Flowering

Spotted

ENGLISH NAMES IN

BOTANIC; NAMBS. 1

Linum Trigyoum

Three atyled Flax

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	ENGLISH N	Coacomb Coral Tree			New Zealand Flax	Polyanthus	ફ	Spotted	do Secondario	I see Crowned	Striped leaved	Chinese Primiose	Polyantius	op	do			Charter Trimrose	2620111		Everlasting	Stock July	op	N. Carlotte	variegaled	מכשוננו זיאר מיים	Polyanthes	•		Cape Jasmioe	do	Chinese Primrose	Polyanthus	Cape Jasmine	Chinese		Stock July	qe	op ,	lris Stock July	do do	
	POTANIC NAMES	Erythrine Crists Galls	Disnihus Caryophyllus Agananthus Umbellatus	Cotyledon sp	Cheiranthua Cheri	Primula Veria	op	Gloxinia Maculata	do de		Fuchsis Macrostemms		•			_	·	_		Cheiranines Cheir					_		Primile Veris		•		Primels.	do do	3 -	Garden			Cheiranthus Cheri	un a	,	I Iris Sp	Ot :	
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7	ENGLISH NAMES	Crown Showy		Purple Dragon Tree	Striped leaved	Remiful	Spotted					SCALIEL	Shows	(wanc	Ethiopisp I ill.	Coxcomb Coral Tree	Showy	Shining leaved			Purnle Dearns Tree	Scarlet	Dwarf Cape Jasmine	Æthiopian Lilly	Blue	Scarlet	Auricula	Cape Didimocarpus	Cassia		i	Scarlet Flowered	Creatileted I and	Auricula	Showy	Striped leaved	Feruvian Turnaol	Chinese Frimrose	Two Coloured	Purple Dragon Floner	Yellow	
	BOTANIC NAMES	998 Hedychium Coronaria 999 Justicia Speciosa		1002 Dracens Ferres	004 Ruellia Formona		_	1007 1008 Bizz Ozel e	1008 Bingings Comments			·	Ť			7.	Francis Speciosa	-	_	_			_	Marcia Cithiopica		_			Listerus Cassia	The control of the grant	Justicia Coccinas	Dracens Terminalia	Ardisia Crenulata	Primola Auncula	Cipainia Speciosa	Heliotronum Permitian	Primula Chinessia	op op		Marcia Northians	:	
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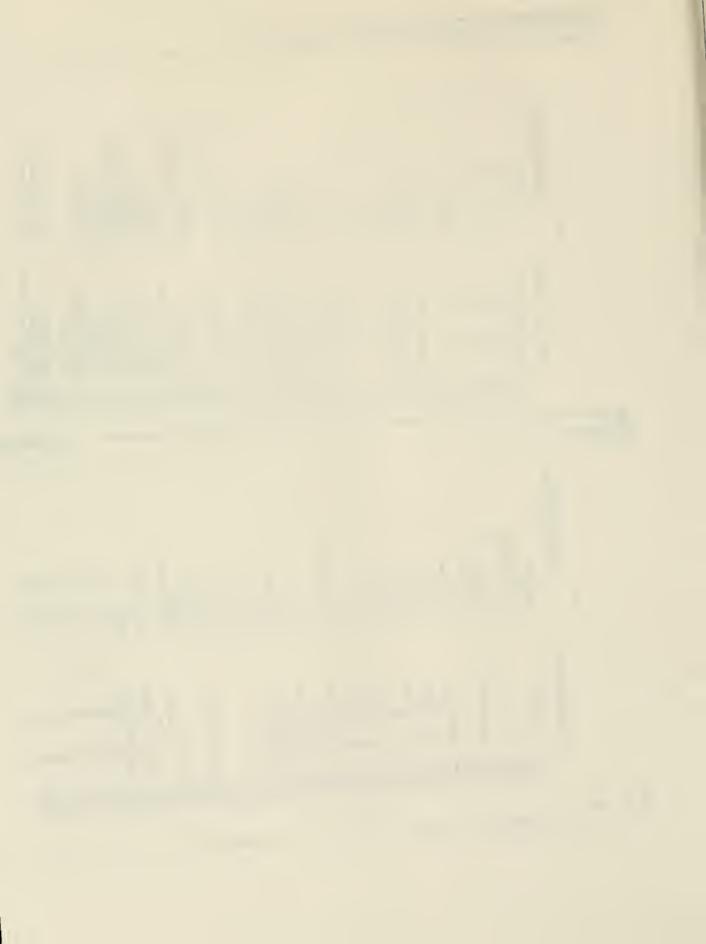


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ENOLISH NAMES	thes and the second	ed	(uly 1-10 1-10 10)	•		Platanus leaved	les .	•	Variegaled Platanus leaved		uly.	-	Polyanthis Chinese primmes	. op		Crisp Flowered	Crocus Flowered	do do Crisp Flowered		•	Δ[n	Peruviso Squill	do	Stock July Flower	Crocus Flowered	req
· \$	Polyanthes do	Variegated Three leaved	Chinese Stock July	흥용	3	Platant	Auricula Polyanthes	op .	Variegated Platanus les		Slock July do	6 6	Polyanthis Chinese or	op -	roiyanines do	Crise F	Crocus	do Crisp F		i	Chinese Stock July	Peruvi	9	Stock J.	Crocus	Variegated
BOTANIC NAMES	Primula Veris	5 Iris Variegala 6 Bouvardia Triphylla	7 Marica Chinenais 1000	·		_	Primula A		-	1 Iris Sp 2 du	en 🕶	ري در در د	7 Primula Veris			2 Iris Sp 3 Amerellis Crisos		5 do : 6 Amerellis Crispa		=	8 do Chioensis	O Scills Peruviana		Ø \$		o Ozalia Fiabellilolia 7 Iria Variegata
•	1142	1145	1147	1149	1151	1153	1156	1157	1159	1161	1163	1165	1167	1169	12.0	1172	1174	1175	1177	1177	1178	1180	1162	1183	1185	1167
A day se l'aig.													1			ï							1 4	7:11	eN 17	A PACE
ENGLISH WAMES	ck July 11. 11. 12. Ch	negated ness Primrose and satural satu	neae 1 !!	nese Primrose	nese	incse Primrose	ndsomest ·	nese	ck July do	do طن	op do		lest Albuen	yantlue	nese Primrose ck July	do	negate i nese	ck July	. op	do do	oese	iegaled	cus Flowered	-	yanthes	do coste primrose
2C ENGLISH WAMES	Stock July 11.	Primrose	Chinese	Chinese Primrose	Chinese	Chinese Primrose Polyanthus		Chinese	Stock July do	op .	op Op		Valiegaled Tallest Albuea	Polyantius	Chinese Primrose Stock July	do	Chinese	Stock July		· •.	Chioese	Variegaled	Crocus Flowered		r Polyanthes do	Chioste primrose (1)
ENGLISH MAMES	Slock July 11.	Primrose		Primula Chinensis Chinese Primrose Perimula Veris Polyanthis	is S	ola Chinensis Veris	sissima	isis Iteri		op op	olo Ob		ima .		do Chinensis Chinese Primrose Stock July		Iris Variegala Variegale I			. •.	.z		Geramum Tristrum Lin Crocus Flowered		Frimula Veria 'Polyanthes de do do 'F' do	



62	BOTANIC NAMES ENGLISH NAMES	Dianthus Caryophylla Carnati	٠	ş	ob ob	. op op	1242 in Stock July	i	Euconiis Punctata	district A strain of		우	do	do do	1255 do "S		Iris Chinenata	Oxalis Finbellibilia	1257 Ixia Crucia Poinsetta Pomseit's	Fuchsia Mirrophy Ila	Cantua Corcinea	Daphne Variegata		Gard	do do	do do	1267 Cantus Coccires Fine Flowering Sage	•	Cantus Coccines	Gardenia Florida	1972 Dapnae vair. 6 Mediterranean Health	Salvia Fulgens	Iris Variegata	Gardenia Florida				Oles Fragratos	1288 do do do	
88 88	ENGLISH NAMES :	Polyanthia	9	Slock July Flower		72	Stock July	Polyanthus	op	Chipene	Polyanthos	Chinese	qo	Polyanthus	Chinese	07	Chinese Primrose		,	do	Crisp leaved	•	Stock July	9 4	9	Crisp leaved	Stock July	Polyanthus	Chinese Primrose		H	Caration Go	do do				00 00		do do	
	BOTANIC NAMES	_	1189 do do.	2 =		98 Amaryllis Crispe		96 Primola Veria	ę	3	18 do Veris	3 -5	유	မှ	4 do Chinenais	3 -	Primule		9 Osalis Hirta Primula Auricula		Amaryllis (0.		3 Amaryllis Crispa		Primula Veria			Hydranges H	Diag		•0	8	8 4	9 0		9	3
<u>.</u>		Ξ	= =		1188	1193	1185	1196	1197	1198	1800	1081	1202	1203	1804	1006	1207	1808	1809		1212	1213	1214	1875	1217	1218	1219	1880	1222	1223	1924	1286	1227	1228	1889	1830	113%	1838	1111	

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31	BOTANIC NAMES ENGLISH NAMES	Salvia Fulgena Verbena Meliodria	1934 October 1935 Salvis Fulgers Sage Scarlet Flowered Salvis Mclindrir Scarlet Flowered Sacretary	1937 Cantus Coccines Courte, Turnsol , Turnsol , Fine Flowered Sage	, 00	Verbens Melindris Heliotropium		Heliotropium T.		piun)	1353 do Scarlet 1354 Cantua Corcinea Scarlet	Heliotropium Captus Coccines			5	Cantua Coccinea	1364 Heliotropium	do	Capitata		1369 do do do do	Cantua Coccinea		Eschacholtzia Califorienais	1975 do do Scarlet	Verbens Melindria	1876 Mimulus Bmithin to Scarlet Flowered
9	ENGLISH NAMES	Uba White Chinese r Ecarlet do	Butcher's Broom Fine Flowering Sage	Smooth leaved Splendid Sage					ca Scarlet	(and)		Scarlet				Meaded Huchaia		A colled Lavender Scarlet		Scarlet Flowered	90	Fine Flowering Sage		Fine Flowering Sage	op		
٠	BOTANIC NAMES	Assles Indies Alba Cantus Coccinis do	Salvia Fulgens	Crategus Glabra Salvia Splendena	Cantua Corcinia Salvia Splendens Heliatronium	Cineraria Cruenta Tustilago fragrous	Saivia Splendens Heliutrapium	op op	Cantus Coccinis Heliotropium	do Gardenia Florida	Cantus Coccinia	Cantus Coccinis	Azska Indica Alba	Azaica Indica Alba	Coronilla Glauca Furbaia Gracilia	Dioses Capitata	Clycine Bimaculata	Cantus Cocciois	do Verbena Malindaia	do	ob.	Cantua Coccinia	Verbens Melindris	Cantus Cocciois	9.4	Mimulus Veriegata	Cantua Coccinia



8

ENGLISH NAMES

White Flowering Mediterranean Heath Scarlet Flowered

Turnsole

Scarlet Flowered Turnsole

Elegant Sweet Scented

Eupatorium Elegens

1438 1439 440 1442 443

1437

Porcupioe Orange

Chipese

Marica Chinensis

441

Citrus Histrix

Cantua Corrinea Cantua Coccinea

Acacia Armata

Searlet Searlet

Fine Flowering Sage

Two Spotted

Glycine Bimaculata

Salvia Fulgens

Marica Chinensis

1436

Chinese

Thyme leaved

Sacholtria Californieusia

1430 1431 433 434 1435

. . .

Bellis Perenois

Melaleuca Thymifolia

Nandina Domestica

1432

Dainey

Scarlet Flowered Furnaole

Large Flowering Brown Stocked Sweet

Long leaved Pine Vellow Coronilla

Magnolia Fuscate

Gorteria Rigens

Rhodora Sp

unus Longifolius

1450 1451 1452

New Zealand Flax Three Styled Flax

Phylica Eriophyra

1445 1446 1448 1449

Linum Trig) num

Armed Acaria

Garden Hydrauges

Alsternis like

Geranium Triumphana

Rhus Alsternia

Primula Veria

1455

Laurus ap

1457

1450

Hydrangea Hortensis

Illicium Floridanum

463 1454

Coronilla Glauca

Silve, edged

Pelargonum Triumphans Pelargonum Macraothop

1461

460 1462 1463

Polyanthes

Red Flowered

Three colured violet Starlet Flowcred . op

Brown stocked sweet ę ဝှ

Fine Flowering Sage Variegated Rosemary

Turnsole

Scarlet Flowered Three Colosed Daisey Scarlet

Mastic Tree Daisey

Berry Flowered

urnsole

Scarlet Flowered

Unisy

Fine Flowering Sage Double Flowering Myrtle

ine Flowering Sage Monkey Flower

Three Coloured Violet

Royal purple Silver edged

1479

Triomphans

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Royal Purple

1470 1469 1471 1472

468

loyal Purple

1466

Macranthon

1464

1465 1467

Triumphene

BOTANIC NAMES

Erica Mediterrapea Cantua Coccinea Heliotropium Geranium Sp Diosms Alba 364

Verbena Melindris Mahernia Odorata 1367

Heliotropium 1359

394

Krica Barcans Heliotropium 395 346

Verbena Melindris Heliotropium 395 3.19 39.7

Cantua Coccinea Viola Tricolor 001 107

405

erbena Melindria 404

은 စု 405 406

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Magnolia Fuscata 10. 1405

tosmarinua Officioalis Carista Fertide 409

Bellis Perennis Salvia Fulgens ris Variegata 413

Verbena Melendris Salvie Fulgens Myrtus Multiplex Sellis Perennis Heliotropium 1415 1416 1410

Cantua Corcenia Viola Tricolor 1480 4.1

Nimulus Smithii Bellis Perennis Schinus Mollis Salvia Fulgena

Viola Tricolor

The state of the s



Royal Purple Triumphane Royal Purple

1525 1526 1527 1528 1529

Triumphans Reyal Purple

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1530 1531 1532

Pelargonum Royal Purple barest Davieanom Kapoleon

Royal Purple 3 Barelayanum Glorianum Reuben Apsley Triumphana ခု 1481 1483 1464

Napoleon 1455 1487

Royal Purple Triumphans

1490 1489

Reuben Apsley

1534 1537 1537 1537 1537 1536 1536

OAVIERALIE

Napoleon

Seelleaniem. Roxal Purpl-Royal Purple

Rubinum

Silver edged Rojel Purple Barclayanum

1541 1542 1543 1544 1545 1545

Trumphans Royal Purple Royal Purple Glorianum 1493 484

1495

Napoleon.

Royal Purple Rose Scented Glorianum Napoleon 1497 1499 1499 1500 1501 1504 1505 1505 1506 1506 1506

Davieanum

Triumphans Royal Purple

Napoleon

Triumphans

op

547 546 1549

9

Napolcon

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Frumphans Radiance

Napoleon

ę

Queen of Scotts Glorisaum 1515

Decora 516 1517 1519 15:0

Murrayanum Rubrum

Barclayanum

1559 1566 1561 1562

Navarido

Royal Purple

Silver edged Royal Purple

1557

Triumphens. Triumphans Glorianum

Napoleon

1550 1551 1552 1552 1554 1555

Murrayanum Rubrum Rose Scenled Triumphana Glorianum 1565

Friumphana Glorianum

Red Rover

Geneium Sp

Triumphans



37

BOTANIC NAMES

Pelergonum Royal Purple Triumphena Royal Purple

1625

1626

Geranium Ardens 1629 1630 1625

Decora Royal Purple

577 578 578 550 560 581 583

1564 1565 1546

1587 1588 1569

1500

Royal Purple

Royal Purple

Priumph ne

Glorianum Glorisoum Nepoleon

Juke of Northumberland Murrayanum Rubrum Apple Scented Geranium Micans 1632 1631

toyal Purple riumphans Sherwoodia 1684 1635 1636

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Royal Purple Napolcon Royal Purple 1641 1642 1643

Royal Purple Triumphans Sherwoodia οp 634 9191

Silver Edged Royal Purple

Juliette Royal Purple Triumphans

599 600 601

Royal Purple

594 595 1596 1597

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1591

Silver Edged Anne Boleyn Royal Purple

Royal Purple Royal Purple

9091

Radiance

6091

1610 19 613 618 1614

1607

Fair Helen

604

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1615

Radiated 649 649

toyal Purple Davieanum 650 651 752

Cistus Rosseus Privorphens Sherwoodie 653

Waterloo Geranium Nutmeg Scented Rose Scented)avieanum 636 657

Crimson Flowered

Scarlet

Rose Coloured Scarlet

Triumphens Royal Purple Waterloo Waterloo 0991 199

Rose Sceoled Davieaoum 664 663

Crimnoo Flowered

Scarlet

Royal Purple

Morrayacum Rubrum

8

BOTANIC NAME

Pelergooum Triumphans

ENOLISH NAME



ENGLISH NAMES OF

38

Fire Scarlet

Pelargonum Royal Purple BOTANIC NAMES

Pelargonum Royal Purple

Royal Purple Silver Edged Glorianum

Royal Purple Rubinum

Sherwoodia Nutmeg Scented

Triumphans Seedling Sherwoodin Sussclanium

1679

Fair Helen Royal Purple

1678 1675

Silver edged

Priumphana

Barclayanum

Banalisk

Trium.plians Dationan

Crimen Flavering

Amandum Rajal Purple

Royal Purple

N. poleon

Priumphans

6591 1690

Trium, hens Reyel Perple Retundslöbium Napoleon Reyal Purple

Reyel Perple Trumptins

Royal Parple Triamphans Deces 1759

Silver Edged Triumphans 0 1743

Futnieg Scented Silver Edged Reyal Purple 1744

Reyal Purple Napoleon

l'riumphans Juliet!e

toyal Purple Triumphans leyal Purpl 1746 1747 1748 1750 1751 1752 1754 1754 1755 1756 1756 1759

Murrayanum Lord Yarborough

Nutmer Secoted

Seedling

Royal Purple

Anne Boleyn

Daviesnum

Silver edged Royal Purple

Lord Yarborough

Priumphens 1691 1693 1694 1684 1685 1666 1697 1698 1700 1700

Silver edged **Friumphans**

Royal Perple Retendifichium Royal Porple

Decora Royal Purple

Silver edged

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Moore's Navarino

Rose Scented

826

Purple Rotuodilobium

Murreyanum Murrayanun

Glorianum

Silver Edged

urple

riumphaos

Ladiance urple

Triumphans Purple

Nutmeg scented Fair Helen Silver Edged Waterloo Triumphans

Purple

Rose Sceuted Purple

Purple Triumphana Purpla

199

88 801 805

Napoleon

Triumphans

Rush lasved Broom

810

Eupstorlum Elegans partium Junceum

Jatropha Sp

Paidium Pyriferum

les Europeus libiscus Mutabilis limosa Sp

* European Olive

Physick not Guera

edychium Coronarium gustrum Lucidum

Chinese Privet

ndigofera Sp Hedychium Coronarium erium Splendens Supressus Sp

ister Argophyllm ledychium Coronarium

Double Oleander Musk accented A

Night Smellior Poplar leaved Fig Jopiter's Beard

estrum Parqui

Triumphana Glorianum Purple urple

Purple Triumphans

804 803

Pelargoonn Purple

BOTANIC NAMES

ENGLISH NAMES.



1 84	ENGLISH WANTES	-	Carolina Jasmine (Principl) of Japan Rose	. 0 \$	Stript leaved			Green Tes		Globe Flowering		Madegascer Perriwinkie	Yellow	·			e e e e e e e e e e e e e e e e e e e			13 P	: : :				Subject of the subjec	•
	BOTÁNIC NAMES	907 White Banksis Rose	- • •	911 Fulgens 1912 Pompone	1914 See Hing See Hing 1915 Daphne Variefials	1917 Camcilia Seedling 1918 Eximia	919 Sections 1920 do	•		Ψ.		1929 Camellia Seedling	1930 Ornithogalum Aureum 1931 Camellia Scedling		Vinca Ros		1937 do 40	1939 Ixora Coccinca				Vinca Ho Camellia		1950 Heliotropium Peruvianuoi 1951 Camellia Seedling	1952 Aletromeria Fattaeina 1953 Tabernæmontana Coroparia 1954 Camellia Seedling	
	whes'	- 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1) T				 4+			_					 ,₽							+	e le		24,4	
*	salvýľ hši ibna	Deuble Nesturtien	Gueva	Hypericum leaved	Scarlet Flowering India Rubber	Poplar leaved Fig.	Four sided Jauted	Vorshiptul Poplar 1	Purple Dragon Tre	Musk Seented A. Four sided	Guava European Olive	Poplar leaved	Persian Lau,el		Hypericum leaved Guava			Cork Tree	Coffee Tree	Night Smell	Poplar leave.		Slander	Dicquei	Evergreen do	
	BOTANG, NAMES	Liplospermum Sp Tropgolum Majus F1 PJ	Orange Myrile Paidium Pyriferum	Jatropha Sp Melaleuca Hypericifolia	Arelia Indica Figus Elastica	Figus Populifolia Ardisia Sologaees	Militatioms Quadrangulaits	Erroberty a Japonica Ficus Religiosa	Draczen Ferres elelianthus Minor	Aster Argophy llus Melastoma Quadrangularis	Psidium Pyriferum	Figur Populifolia	Geranium Laurus Persica	Hibren Sp Indigefera Su	Melaleuca Hypericifolia	Geranun	Rhus Sp	Quercus Suber	Coffee Arabica Hibisons So	Cestrum Parqui	Fieus Populifolia "	Ceranium	Passiflora Cornica 1.31.3	Bigoonia Stans	Louicera Flexuota	
		1860		•	1657			1674 1		1877	_	•		1684 1			1890	1591	-			-		•	906	



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	MES . J.																																										-				5 3.	
53	ENGLISH NAMES							Double Strined	Monnie alle																		Black Tes							. Yellow	W'hile									Donale	Furpic		Turnsole "	
	BOTANIC NAMES	J. Democrae	Seeding 1 On	Maring	Pretto Sanding	Double White	110 Double wine		do Variegala				60 do		000	an do	Vinca Roses	n	01, 00	Vinca Kovea	ă	10 BB	, op 05			do do	Then Bohen .	Camellia	do Se	o p	qo	op .	00 00 TO			Trore Coccine			_				Camellia &		7 Arales Phonoceis			
المعاد الما	-n +5		*003	200	5002	2003	2007	300.	2009	2010	2011	2012	2013	2014	7 2015	2016	2017	910.	5 18	2020	2021	: 022	5008	2021	8036	203	9708	6803	2030	8031	2032	2033	\$03¢	2077	203	8609	4034	2040	2041	2002	2013	2044	804 5			\$04g		,
	MES			•		-	•										٠																												•	£	•	
	ENGLISH NAMES				١																																				lowered				Florence	r son cred		•
4													Puenle	. c. b.r.							Velley											Marile land	31.16.16								Pacony Flowered			-	Apemone Floring	-		
	BOTANIC NAMES	do do	Vines Roses	Camellia Seedling	Didymocarpus Rexit	Camellia Soedling	do do	do do		-	do do	op op	A sales Phonecis	Vinca Rosea	Camellia Seedling	edo edo					Ornithogelum Aureum	Camellia Seedling	do do			ž			Sulla Seedling			2	do Seedliog	do de			_			do do				_	<		do Single Red	
		1855						1961	1962	1963	1964	1965					1970	1671	1979	1975				1977	1976	1000	1061	1980	1963	1984	1985	1986	1987	1968	1959	030		200	1004	1995	1996	1001	1096	1000	000	1000		



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	ENGLISH MAMES	-	Cypress	aved	æ.		Peppermint Scented			Libert		Waterloo	Purple	9	900	Purple	do	Crimson Silver safeed	Fan Helen	Royal Purple	Kose Scenied	Royal Purple	Crimson	Triumphans	Nutmeg Scented		Ivy leaved	Zebra leaved	Porcupiae	Waved leaved	Yew Tree broad leaved	Brown Stalked Sweet	Purple Dragoo Tree	Rib leaved Fig.	Persian Laurei	Jadian Rubber
	BOTANIC NAMES	Ğ.	do do	Calathea Zebiina	Geranium	OP T	g ap	op		do Secklesnium	op ,	op -	<u> </u>	2 2	do	op	do do	do	op op	3 %	, ob	900	g op	do .	Fuchsia Cocemes	qo		do Ardens	Chamzropa Histrix	Pinus Longifolis	Taxus Latifolius	Laurus Cassia	Was denis Domesties	Acacia Armata		Corypha Umbraculifera Taxus Latifolius
		2099 2110 2101				2 06	2013	2109	2110	2111	2]) 5	2113	2114	2116	2117		9212	1513	7716	212	2125	9126	2126	8189	2150	28 [36	2133	g134	8130	2137	2136	40 2	2141	8 42 8 43	6) 44	2145
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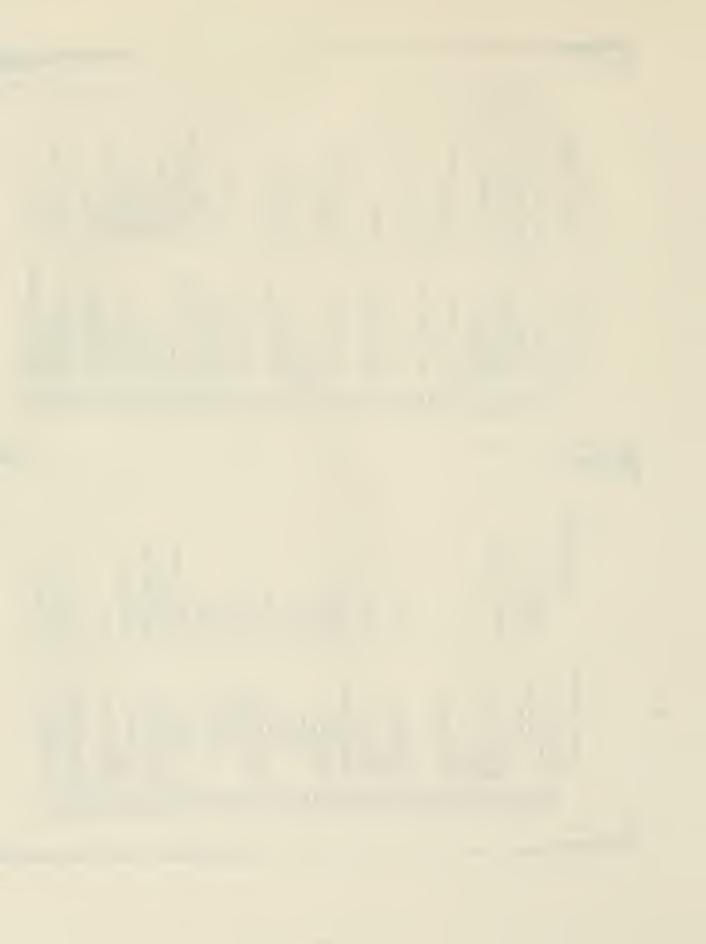
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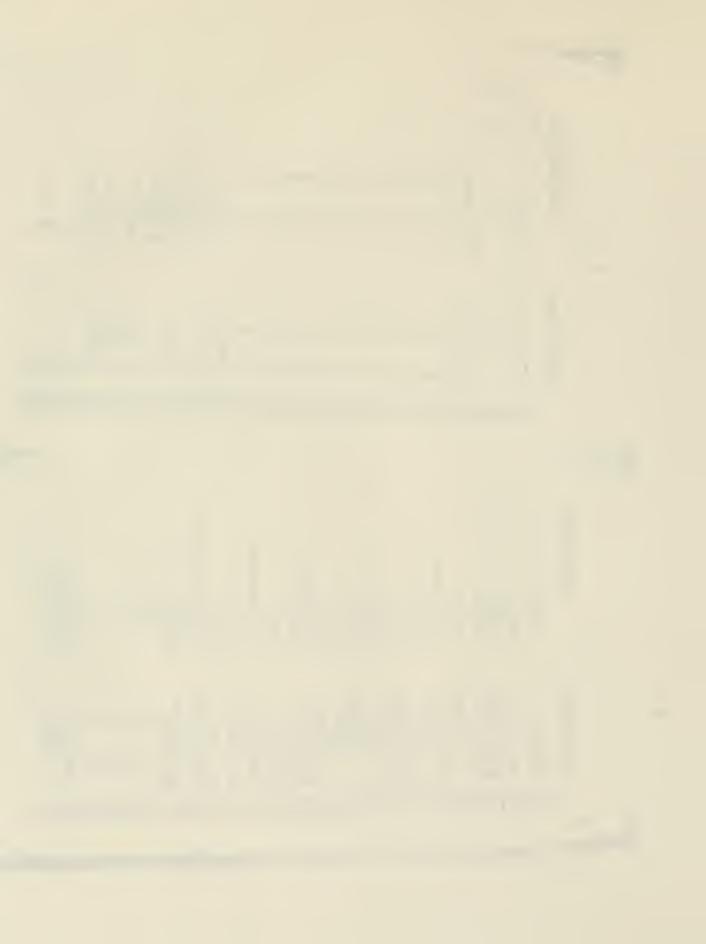
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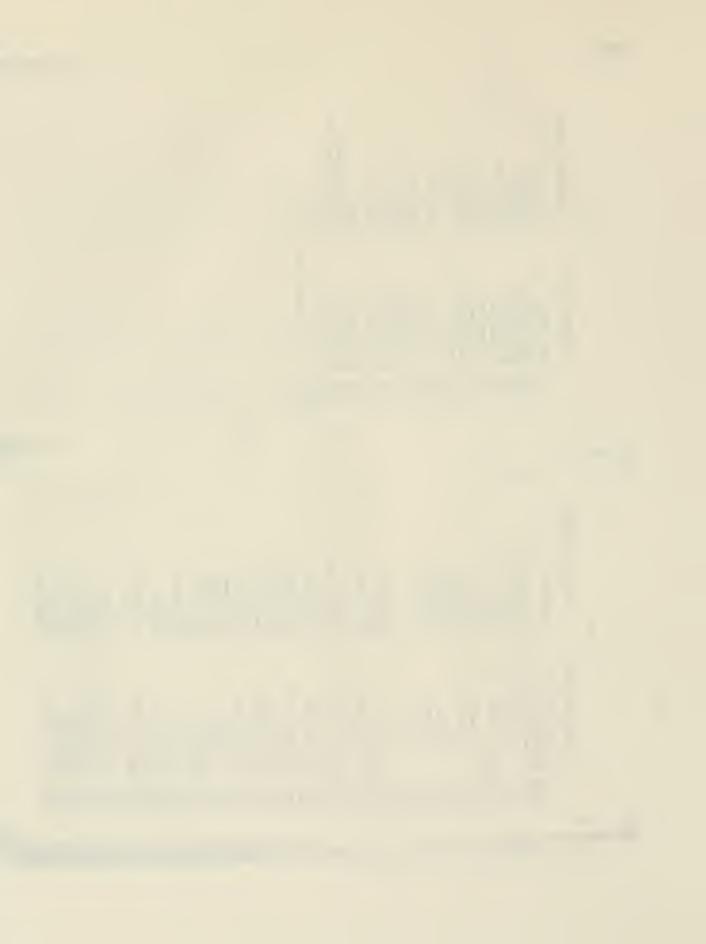
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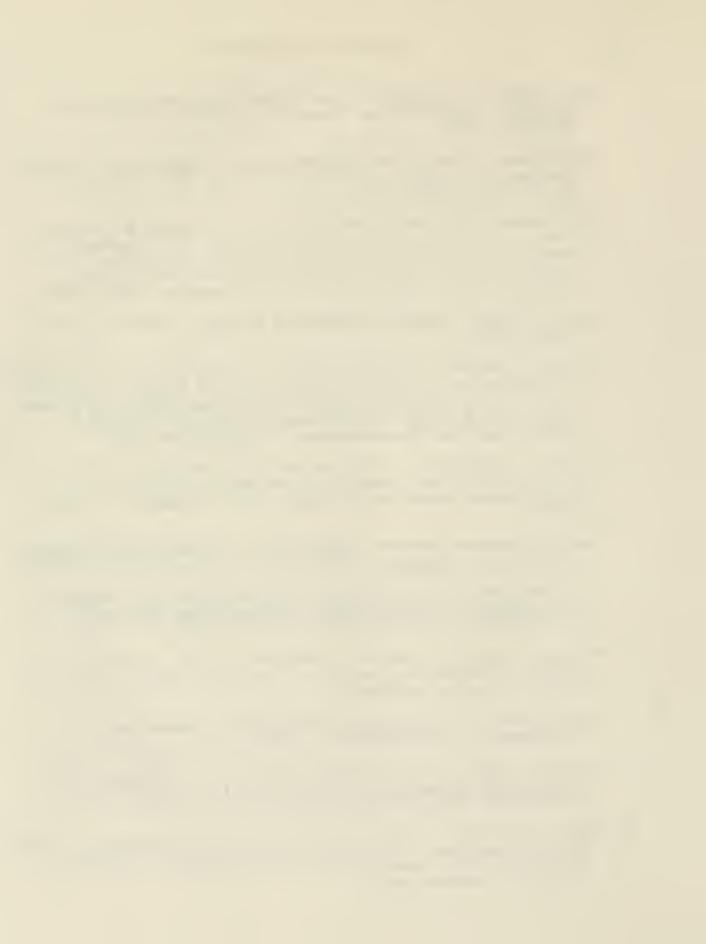
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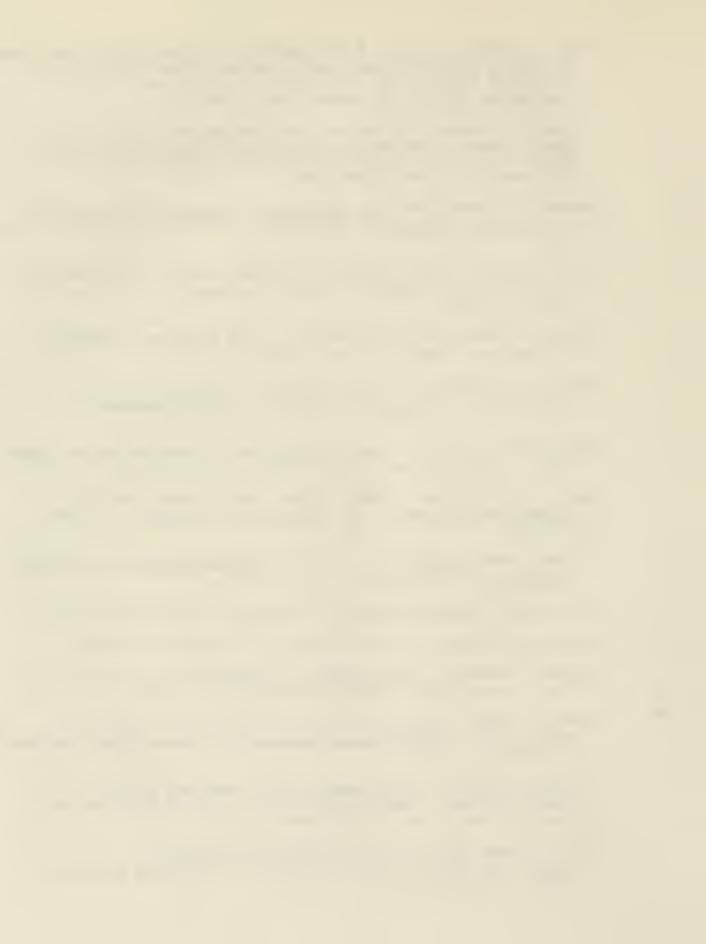
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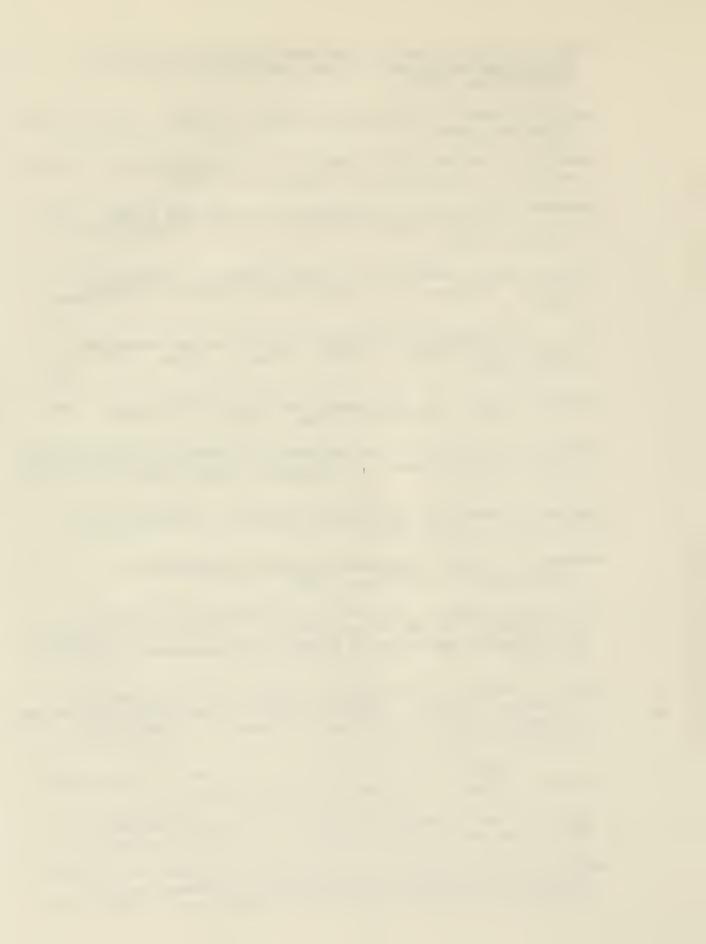


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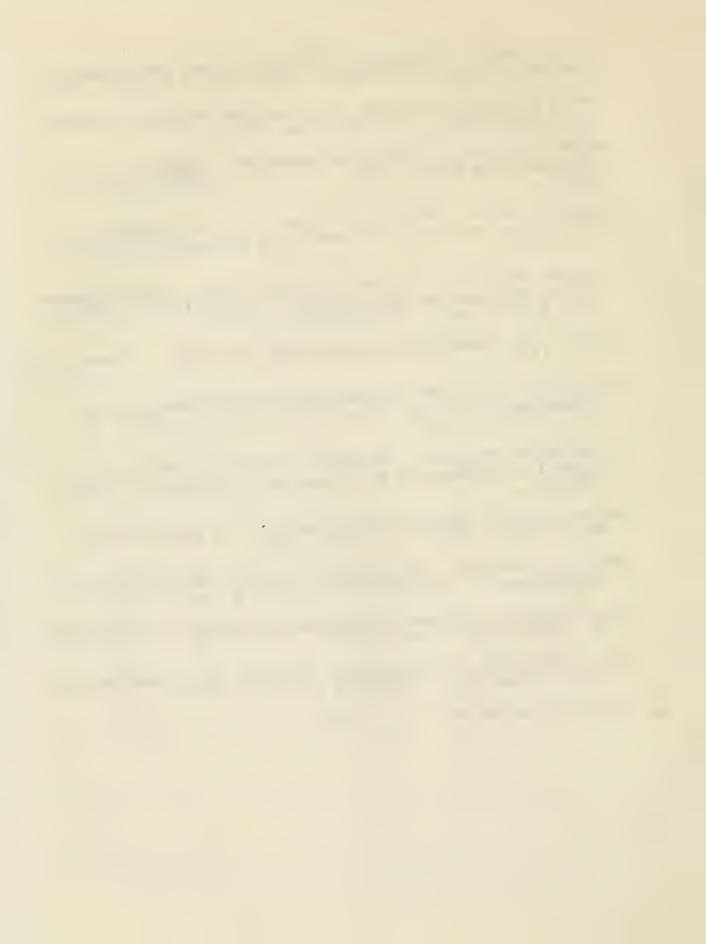
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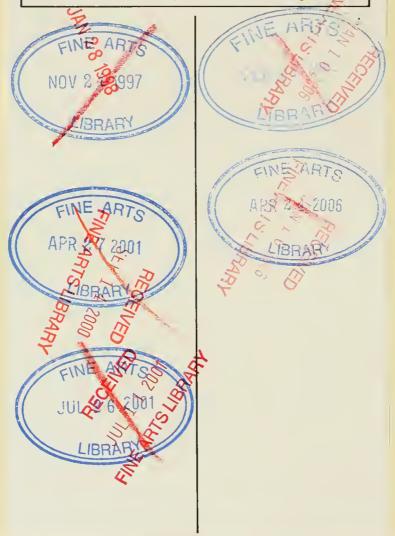


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