POPULAR GARDENING MAGAZINES AS AN INDEX TO THE DEVELOPMENT OF ORNAMENTAL HORTICULTURE IN THE UNITED STATES

Thesis for the Degree of M. S.
MICHIGAN STATE UNIVERSITY

Mary Bennett Little

1957

POPULAR GARDENING MAGAZINES AS AN INDEX TO THE DEVELOPMENT OF ORNAMENTAL HORTICULTURE IN THE UNITED STATES

By

Mary Bennett Little

A THESIS

Submitted to the School of Advanced Graduate Studies of Michigan State University of Agriculture and Applied Science
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE

Department of Horticulture

1957

ACKNOWLEDGMENTS

The author wishes to express her sincere appreciation to Dr. Donald P. Watson, under whose direction and guidance this study was undertaken and completed.

Gratitude is also expressed to Mr. Clinton Holland for his many helpful suggestions.

The author is also indebted to Mrs. J. D. Fliehler and Mrs. Shirley M. Goodwin, for their assistance in preparing this manuscript.

POPULAR GARDENING MAGAZINES AS AN INDEX TO THE DEVELOPMENT OF ORNAMENTAL HORTICULTURE IN THE UNITED STATES

By

Mary Bennett Little

AN ABSTRACT

Submitted to the School of Advanced Graduate Studies of Michigan State University of Agriculture and Applied Science in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Department of Horticulture

Year 1957

Approved Donald P. Watson

ABSTRACT

Within the last decade the popularity of gardening as a hobby, an interest, has increased greatly. Evidence of this interest in home gardens is found in popular magazines and newspapers.

The study was intended to show trends in horticultural information in agricultural and horticultural publications from 1810 to 1957. These trends included the development of an interest in horticulture, the reporting of specific information concerning ornamental plants, and the branching of the home owner's interests in ornamental horticulture.

A total of 76 volumes and 34 magazines was used in this study. The magazines were selected on the basis of their period of publication, their influence at the time of their publication, and their location.

The study shows how conditions in America either fostered and hindered the activity in the field of ornamental horticulture. The first interest indicated in these magazines was in plants of a useful nature as well as plants of native origin. The grape attained great fame.

The birth of two horticultural publications in 1835 and subsequent ones, in later years, increased the amount of horticultural information. These magazines show how the colonists first became concerned with the appearance of their yard and how this interest changed as America grew into a successful nation.

The fear of displaying any dependence on a foreign country encouraged the use of native plants. Gradually writers began to

recommend the use of exotic plants. That most of these magazines were partially eclectic, and took liberally from foreign publications indicated the admiration of foreign progress in horticulture.

After 1860 exotic plants became fashionable and the indigenous ones common. In the 1900's plants were accepted not only on the basis of their beauty but also on the basis of the purpose they might serve.

The magazine, also told of the change in emphasis from the formal to the informal garden. Woody plants gained increasing prominence as the perennial border gained popularity.

New garden tools and equipment are partially responsible for increased interest in gardens. Magazines have drawn attention to this phase of gardening since the first simple tools were introduced. Another recent emphasis in gardening magazines, outdoor living, reflects the new American way of life. The small well-kept yards have replaced the vast estate grounds.

The broadening interest in gardening is further reflected in the magazines style of writing.

The first periodical appealed to the more wealthy and more educated as they were the first to have time for gardens. In recent years practical gardening magazines have been edited to appeal to a more popular audience.

These magazines show that many topics remain the same; people have always been concerned with such practices as pruning, controling insects and mulching. The type information given about these practices has changed greatly as scientific knowledge has advanced. However, the

increased leisure time of the middle class American has played a large part in extending the appreciation of the beauty of plants and the home garden.

TABLE OF CONTENTS

TABLE OF CONTENTS - continued

LIST OF TABLES

TABLE Page

INTRODUCTION

Gardening has long been an admired art. When the colonists came to America they brought with them backgrounds of various gardening techniques. A new country gave little time for such luxuries as ornamental plants. As leisure time developed gardeners in America struggled to create their own distinctive gardens, in spite of strong foreign influence which they grudgingly admired. Agricultural and horticultural periodicals picture man's aesthetic interest, as it matured with a nation, developing into a substantial art which has made America a more pleasant place.

Statement of Purpose

The purpose of this study is to investigate trends in the development of ornamental horticulture in America as evidenced in agricultural and horticultural magazines from 1810-1957.

Specifically this study concerns itself with: 1) the emergence of horticultural information in the early agricultural periodicals; 2) the broadening of horticultural interests as America prospered; 3) the recognition of horticulture as a science and an art; 4) the branching of interests in ornamental horticulture, and 5) the correlation of the development of ornamental horticulture with the periods most encouraging to this development.

Limitations

The study includes only popular American agricultural periodicals from 1810 to 1860 and popular American horticultural periodicals from 1835 to 1957.

An attempt was made to cover only the more important of the agricultural and horticultural periodicals. A thorough study of these publications would be impossible. As Bailey stated many horticultural journals lived and died with their existence never having been recorded.[1] According to secondary references, however, the most influential of these magazines were included. The availability of the various magazines again partially determined those used.

To obtain horticultural information from the magazines between 1810 and 1860, the author reported all of the material pertaining to the outdoor culture of fruits and ornamental plants in 21 magazines and a total of 29 volumes, plus 20 numbers within one volume. In each case the first volume available and each succeeding tenth available volume were used. In many cases it was difficult to judge exactly which would be the tenth volume, for the magazines frequently started new series beginning the volume numbering over again. When this happened, a period approximating nine years was skipped, regardless of the volume number. The only exception to the above practice was in the case of The Agricultural Museum, 1810-1812, and The New England Farmer, 1822-1825. Due to their early date, Volumes I and II of The Agricultural Museum

---

[1]L. H. Bailey, "North American Horticultural Periodicals," The Standard Cyclopaedia of Horticulture, II (1947), p. 1559.

and Volumes I, II, III and IV through Number 20 of The New England Farmer were used.

For information about Ornamental Horticulture between 1860 and 1910 the writer used the method described previously. A total of 12 magazines and 20 volumes was included in this part of the study. The subject of Fruit Growing was discontinued in 1860.

For the most recent material dealing with Ornamental Horticulture from 1910-1957, the magazines, Flower Grower and Horticulture were used extensively. Instead of beginning with the first volume, the writer began with the latest twelve issues and went backwards, omitting nine years and selecting the issues from July to June. The subjects of the five chief articles of each issue were listed. The Gardeners Chronicle was treated in a similar fashion, with one exception, the volumes used consisted of the earliest available and each succeeding tenth volume. A fourth magazine, The Home Garden, 1943-1953, was treated differently as it was impossible to choose five feature articles. In this magazine the subject of each article of any consequence was recorded for the Volumes I and II and Volumes XIX and XX. Six magazines were used for the years 1910 to 1957.

Justification

"Periodicals of any subject are supposed to chronicle all the fleeting events of the day and the years and to preserve them for future generations."[1] Assuming this to be valid, a study of the development of

---

[1]Ibid.

horticultural information in periodicals should portray trends of public interest in horticulture. In turn those trends would show the development of ornamental horticulture in America.

An additional value of this study is an insight into the effect of world conditions on the activity and interest of horticulture. This study also indicates how magazines concerned with horticulture changed to adjust to new demands.

HISTORICAL SKETCHES OF THE PERIODICALS

Agricultural

Early writings did not distinguish horticulture from agriculture; perhaps the first American book, The Husbandman's Guide, combining the two was published in 1710.[1] One hundred years later, The Agricultural Museum, the first agricultural periodical in America, began on July 4, 1810, in Georgetown, Ca., or District of Columbia.[2]

The full title given this small octavo was The Agricultural Museum, Designed to be a Repository of Valuable Information to the Farmer and Manufacturer, the Means of a Free Communication of Sentiment and General Interchange of Ideas on the Important Subjects of Their Occupation. Each semi-monthly issue contained extracts from foreign periodicals, articles from American newspaper, proceedings of agricultural societies, and letters from the readers.[3] In spite of the function this magazine served, it is thought to have ended with Volume II.[4] Its brief life-span is attributed to the varied interests of its editor, the Reverend David Wiley, and the apparent small circulation of the magazine.[5]

---

[1]L. H. Bailey, "Horticulture," The Standard Cyclopedia of Horticulture, II (1947), p. 1509.

[2]Clarebel R. Barnett, "The Agricultural Museum; An Early American Agricultural Periodical," Agricultural History, II (April, 1928), pp. 99-102.

[3]The Agricultural Museum, I (1811).

[4]Barnett, loc. cit.

[5]Ibid.

Although The Agricultural Museum is known as the first agricultural periodical, The American Farmer, a weekly eight page quarto, is considered the "great precursor of present agricultural periodicals."[1] This paper began April 2, 1819 in Baltimore, under the editorship of John S. Skinner. Its purpose was to give the reader knowledge and skill to manage the farm.[2] That the paper's successful career continued until 1894 under various titles, with new series beginning in 1866 and 1884, indicated that it was highly valued during this period.[3] While concentrating on agriculture, horticulture gained a heading of its own in Volume One. In these columns were found nursery reports, as well as advice about the fruit and kitchen gardens.[4]

Bailey, however, states that The New England Farmer, another eight page quarto, was the first to devote any important space to horticulture. He considered this weekly instrumental in the formation of the Massachusetts Horticultural Society.[5] This journal, first issued in Boston August 3, 1822, was edited by Thomas G. Fessenden, whom Mott described as a brilliant, eccentric and interesting man of letters.[6]

---

[1]Ibid.

[2]Gilbert M. Tucker, American Agricultural Periodicals, (Albany: By the author, 1909), p. 71.

[3]Ibid.

[4]"Horticulture," The American Farmer, I (Oct. 22, 1819), pp. 233-234.

[5]L. H. Bailey, "North American Horticultural Periodicals," The Standard Cyclopedia of Horticulture, II (1947), p. 1559.

[6]Frank Luther Mott, A History of American Magazines, I (New York: D. Appleton and Co., 1930), p. 317.

Fessenden contributed a great deal to the development of horticulture in America; his book, New American Gardener, was published in 1828.[1]

This series of The New England Farmer ended with Number 20 of Volume IV in 1825; however, in 1832 a continuation of this periodical under the title The New England Farmer and Horticultural Journal appeared. Fessenden remained the editor and John G. Russell the publisher. After Fessenden's death in 1837, the magazine changed hands until in 1846 the list of subscribers was given to Luther Tucker's Horticulturist. In 1848 a quite different New England Farmer began and continued for twenty-two years.[2] The changing names and beginning of new series in these early periodicals is quite confusing; however, The New England Farmer (1822-1846) was considered to be one of the earliest and most influential agricultural journals.[3]

In 1831 Luther Tucker began another weekly paper, The Genesee Farmer in Rochester, New York, which continued with minor changes in its title until 1865.[4] In 1839 it merged into The Cultivator, a periodical begun in 1834 by Jesse Buel in Albany, New York. In 1840 The New Genesee Farmer and Gardener's Journal appeared and continued until 1866 when it merged with The American Agriculturist.[5] At the same time The Cultivator owned by Tucker also prospered, becoming The Cultivator and Country Gentleman in 1833, until in 1889 The Cultivator was dropped from the

---

[1]Bailey, loc. cit.

[2]Mott, loc. cit., pp. 317-319.

[3]Albert Lowther Demaree, The American Agricultural Press, 1819-1860, (New York: Columbia University Press, 1941) pp. 321-326.

[4]Tucker, loc. cit., pp. 73-74.

[5]Ibid.

title, leaving the well-known magazine, The Country Gentleman.[1]

In Richmond, Virginia, Edmund Ruflin began The Farmers' Register in 1833. This southern periodical ended in 1842, to be followed by The Southern Planter.[2]

In 1842, A. B. Allen and R. L. Allen founded The American Agriculturist in New York. This journal was known for its large and wide circulation increasing from 10,000 in 1842 to 100,000 in 1864. In 1855 Orange Judd, the co-editor bought it, and his policy of combatting fraud, spreading scientific knowledge and promoting new methods gave him, as well as the publication, a high place in agricultural journalism.[3] Later, edited by Professor George Thurber, a botanist at Michigan Agricultural College, The American Agriculturist continued its emphasis on scientific authority and practicality. By 1872 it had absorbed twenty-six competitors. In 1922 it became The American Agriculturist, Inc.[4]

Also appearing in 1842 was The Michigan Farmer, a small, sixteen-page monthly which is now witnessing its second century of publication. The early issues of this magazine gave considerable space to horticulture and valuable seasonal information. John C. Holmes, author of The Early History of Horticulture in Michigan, was in charge of the Horticultural Department of the magazine in its early period.[5] The magazine frequently

---

[1]Librarian, Michigan State University.

[2]Demaree, loc. cit., p. 15.

[3]Mott, op. cit., pp. 728-730.

[4]Ibid., p. 730.

[5]Joseph George Duncan, The Michigan Farmer: A Century of Agricultural Journalism, 1843-1943. Unpublished thesis, Michigan State College, 1943.

copied articles from other magazines as well as books; however, this was a common practice among early American periodicals.[1]

From 1843 until 1866 The Ohio Cultivator was published in Columbus, Ohio. In 1855 The Ohio Valley Farmer began in Cincinnati and continued until 1861. From 1852 until 1854 The Farmer's Companion and Horticultural Gazette was published in Detroit, Michigan.[2] This magazine had a regular Horticultural Department, as did The Northwestern Farmer and Horticultural Journal published in Iowa from 1857-1859.

Of these and other agricultural periodicals not mentioned, Tucker said that the motives leading to their establishment were to benefit the public and to promote the basal art of American life. Continuing he said, "it may be fairly claimed that no other class of periodicals stands higher in point of conscientious and independent editorial management, and that few were so careful about admitting anything of doubtful character to their advertising column.[3]

Horticultural

Bailey in 1915 stated that probably as many as 500 horticultural journals had been started in America, many of which never attracted the attention of a single collector or library. He believed that there were more than 60 horticultural journals being published.[4]

---

[1]The Michigan Farmer, III (1845).

[2]Librarian, Michigan State University.

[3]Tucker, loc. cit., p. 80.

[4]Bailey, loc. cit.

In 1832 David Landreths started A Floral Magazine in Philadelphia; however, it was discontinued after a few issues as tradition says it did not pay.[1]

The Horticultural Register and Gardeners' Magazine, which was published in Boston January 1, 1935, was known as the first journal to specialize from the agricultural periodical.[2] This magazine continued for four years edited by Thomas G. Fessenden and J. E. Teschemacher. In spite of its short lifetime, Bailey called it "a magazine of more than ordinary merit."[3] In his introduction Fessenden felt that the object of the magazine was utility, not display, stressing that the colored illustrations were designed for scientific purposes. It was his opinion that the magazine would "generally avoid words of learned length and thundering sound, and that botanical and technical words would be followed by an explanation."[4] Such statements indicated that the editors were appealing to a broad audience. Also significant to this magazine's approach was Fessenden's former association with The New England Farmer. To gain some of his former readers, Fessenden chose to promote horticulture by defining gardening as a kind of agriculture, that might be considered miniature farming, saying that the more perfect farming became, the more similar it was to gardening.[5]

---

[1]Ibid.

[2]Tucker, loc. cit., p. 79.

[3]Bailey, loc. cit.

[4]T. G. Fessenden, "Letter of Introduction," The Horticultural Register and Gardeners' Monthly, I (Jan, 1835) p. 2.

[5]Ibid., p. 3.

Concerning the location of his magazine, Fessenden said that no part of the United States presented greater natural advantages for the pursuit of horticulture than Boston.[1] Although The Horticultural Register was similar to Loudon's Magazine in England, and contained extracts from it and other foreign publications, the whole magazine seemed to echo the sentiment Fessenden quoted from the memoirs of a French nobleman: "I could wish to inspire all the world with a taste for the garden."[2]

With a similar purpose, another horticultural magazine began in Boston in 1835. This one was known by the following titles during its 33 year existence: The American Gardener's Magazine, The Magazine of Horticulture and Hovey's Gardener's Magazine.[3] C. M. Hovey and P. B. Hovey, Jr., the conductors (editors) were also anxious to spread the love of horticulture. Their purpose was "to promote a taste for the art among all classes of society and offer observations which will direct attention of those who have not impartially considered the subject, to its interest, value and importance."[4] In a later number is this statement: "To record the progressive advancements of, and improvements in, the science of horticulture, in all its branches, has been our first and principal purpose."[5]

The magazine seemed to do this. Under its section, "Original Contributions," were letters and articles from contributors throughout

---

[1]Ibid., p. 2.

[2]Ibid., p. 1.

[3]Bailey, loc. cit.

[4]C. M. Hovey, "Introduction," Magazine of Horticulture, I (Jan. 1935), p. 2.

[5]Hovey, "Preface," ibid., p. III.

the country. Hovey called his contributors the "first practical men, or gardeners who knew how to write as well as practise." Under the heading of "Miscellaneous Intelligence" were notices of progress in horticulture in foreign countries.[1] Hovey pointed out that the English and French periodicals contained "most valuable and desirable information" and since expense prohibited many from seeing these magazines, he stated that he would select from them. Frequently the conductors attached a page or more of their own views to articles taken from these foreign periodicals.[2] Hovey's magazine had definitely a personality of its own, created by its editor whose opinions were widely discussed in the other periodicals. In 1868 the magazine was consolidated with The American Journal of Horticulture under the title Tilton's Journal of Horticulture and Floral Magazine.[3]

The third periodical of equal importance in the field of horticulture was The Horticulturist and Journal of Rural Art and Rural Taste which was established July 1846 in Albany, New York. The Horticulturist was first published by Luther Tucker and edited by A. J. Downing, the author of Fruit and Fruit Trees of America. After Downing's death in 1852, the publication had a series of well-known editors including James Vick, Patrick Barry, author of Fruit Garden, J. J. Smith, Peter B. Mead and G. E. Woodward. In 1875 The Horticulturist united with The Gardener's Monthly of Philadelphia.[4]

---

[1]Ibid., pp. III-IV

[2]Hovey, loc. cit., p. 2.

[3]"Suspension of Hovey's Magazine," The Gardener's Monthly, II (Jan. 1869), p. 19.

[4]Bailey, loc. cit.

Tucker considered that The Horticulturist was written in a somewhat lighter and more popular vein than Hovey's Magazine or The Horticultural Register.[1] This suggests that The Horticulturist may have had a wider audience than the other two and there is evidence that The Horticulturist had more circulation in the west in 1855 than Hovey's did.[2] The Horticulturist in 1865, however, stated that it had a large circulation "principally among the wealthy men of our country . . . who have fine farms and money to spend."[3] As no circulation figures were given for either Hovey's Magazine or The Horticulturist, it is impossible to say which had the wider influence; however, the duration of their publication is evidence of their profitable career.

Of these horticultural journals born in America before 1850, Tucker in 1909 said, "It is not too much to say that these three covered the whole field of horticulture, including pomology, flower and landscape gardening in all their ramifications, as no periodical has since covered it."[4]

In 1859 Thomas Meehan, an admirer of Hovey, began The Gardener's Monthly and Horticultural Adviser in Philadelphia, Pennsylvania, devoted to Horticulture, Agriculture, Botany and Rural Affairs. Meehan was a graduate of the Royal Botanic Garden, Kew, England, and author of the book, The American Handbook of Ornamental Trees.[5] Meehan maintained

---

[1]Tucker, loc. cit., p. 79.

[2]The Michigan Farmer, XIII (1855), p. 30.

[3]The Horticulturist, XX (Nov., 1865), p. 369.

[4]Tucker, loc. cit.

[5]The Gardener's Monthly, II (1869), frontispiece.

that nurseries or other horticultural establishment afforded excellent schools for "conductors" of magazines and that the public regard for a magazine owned by such an establishment should not be lowered. In 1869 Meehan stated that although the circulation fell during the war, he believed that no other purely horticultural journal had ever had a list of paid-up subscribers equal to The Gardener's Monthly.[1] He asked those who took the journal to pass it around to their friends; however, he cautioned that one could not rely on books or periodicals if he had no practical experience, for these "are revolutionary, intended to improve old practices" and without the knowledge of these old practices the reader could not evaluate the new methods.[2] In 1888 The Gardener's Monthly merged with another publication edited by Meehan, The American Garden.[3]

The American Journal of Horticulture and Florist's Companion or Tilton's Journal of Horticulture began in Boston in 1867. This was edited by the younger Robert Manning the last three years of its career until its discontinuance in 1871.[4] Meehan had predicted great success for this journal in 1869 after it absorbed Hovey's Magazine; however, no explanation was given for its failure.[5] The first issue stated that the magazine was not supposed to be different from other horticultural publications, but that its purpose was to "lend our aid to the

---

[1]Ibid., (Dec. 1869), p. 367.

[2]"Practical Gardening," The Gardener's Monthly, XI (May 1869), p. 143.

[3]Bailey, loc. cit.

[4]Ibid., p. 1560.

[5]"Suspension of Hovey's Magazine," loc. cit.

improvement of horticultural science and the dissemination of information on floriculture and pomology."[1] The editors pledged a publication of high character that had no bias interest in a horticultural establishment. They also insisted that it would be for the rural and urban gardener. Besides having flower, fruit and vegetable departments, the magazine devoted attention to architecture, landscaping, entomology and ornithology.[2]

In 1878 James Vick, a seedsman, began Vick's Monthly Magazine in Rochester, New York. This journal began as a 32-page magazine with a handpainted plate at the beginning of each issue.[3] Vick, stating some of the objectives of his magazine, said that it would instruct amateurs about the following subjects: vegetables, fruits, flowers, ornamental plants and trees, and the native flora. The magazine displayed civic concern by further pledging itself to the improvement of home grounds, school, and other public grounds.[4] At the close of Volume X, the publisher indicated that the magazine's readers and contributors were more numerous than at the beginning of the year.[5] By 1896, however, the magazine had dwindled to 16 pages.[6] By Volume XXX in 1906 the complete character of the magazine had changed; Vicks had become a general magazine containing fiction, with horticulture remaining only as one of

---

[1]"Introduction," American Journal of Horticulture, I (1867), p. 1.

[2]Ibid., pp. 1-4.

[3]Vicks Monthly Magazine, I (1878).

[4]Ibid., X (Nov. 1887)

[5]"Close of the Volume," ibid., (Dec. 1887), p. 379.

[6]Ibid., XX (Nov. 1896).

many departments.[1] The number of advertisements and the cheap subscription price (50¢) indicated that the magazine attained a wide circulation. It ended in 1909.

The American Garden, A Monthly Journal of Practical Gardening, began in 1879 in New York. In volume VI the editor, Dr. F. M. Hexamer, boasted that the magazine had broken all mercantile affiliations and was now strictly independent.[2] This 24-page magazine had section headings including vegetables, fruits, flowers, window gardens, lawns, landscaping, foreign gardening, exhibitions and societies.[3] L. H. Bailey was its editor from 1890-1893, during which time the magazine changed its name to American Gardening.[4] At this time the magazine boasted that it had a regular staff of practically engaged men for its various departments; it had no armchair editors.[5] In volume XXIV the editor stated that the magazine was not a trade paper; that it appealed to all who were interested in plants.[6] Soon after this in December of 1904 The American Gardener ceased publication as a general horticultural magazine. The Fruit Grower of St. Joseph, Missouri, took over the mailing list.[7]

---

[1]Ibid., XXX (March 1906).

[2]American Gardening, VI (Jan. 1885), p. 14.

[3]Ibid., (1885).

[4]Bailey, loc. cit.

[5]American Gardening, XV (Oct. 1893), p. 8.

[6]Ibid., XXIV (May 1903), p. 236.

[7]Bailey, loc. cit.

During its career The American Garden absorbed The Gardener's Monthly and The Ladies Floral Cabinet in 1887. Later it also absorbed Flower Garden and Popular Gardening.[1]

Popular Gardening and Fruit Grower was founded in 1885 in Buffalo, New York, by Elias A. Long, the author of Ornamental Gardening for Americans.[2] At the top of each monthly issue was this quotation from Milton, which gives the spirit of the publication: "Accuse not nature, She Hath Done her Part; Do Thou but Thine." This journal declared its purpose to be the "brightest and cheapest, most useful and most popular horticultural magazine in America."[3] Previous to its merger with American Gardening in 1892, Popular Gardening had absorbed The American Horticulturist which began its career as The Michigan Horticulturist September, 1885, in Detroit, Michigan.[4] This journal, edited by Charles W. Garfield, secretary of the Michigan State Horticultural Society, was begun to represent Michigan horticulture in its "advanced position."[5] At the end of Volume I the sponsors felt that there was a demand for a national horticultural journal;[6] however, in January of 1887 before Volume II was complete the monthly was sold to Popular Gardening.[7]

In 1886 Thomas B. Jenkins, horticulturist, began a more unusual type of journal, The Horticultural Art Journal, in Rochester, New York.

---

[1]Ibid.

[2]Ibid.

[3]Popular Gardening, I (Oct. 1885), p. 4.

[4]The American Horticulturist, II (Dec. 1886), p. 93.

[5]"Publishers Department," ibid., I (Sept. 1885), p. 23.

[6]The American Horticulturist, I (Aug. 1886), p. 453.

[7]Bailey, loc. cit.

Jenkins said he intended to make the magazine a "perfect record of horticultural productions as they are introduced." He stated that each month he would have four full-page, colored plates. Art work was definitely the emphasis of this magazine which completed only six volumes ending in 1891.[1]

In 1888, Garden and Forest, conducted by Charles S. Sargent, director of the Arnold Arboretum and Professor of Arboriculture at Harvard, began as a weekly in New York. Bailey said this journal represented "ten volumes of high character entitled to rank as one of the noteworthy undertakings in the field."[2] He further pointed out that Garden and Forest was the first attempt in America to establish a weekly publication similar to the great English journals.[3] The 12-page publication included horticulture, landscape art, and forestry in its subject matter and had a regular letter from a London editor concerning foreign news in these fields. Garden and Forest was of a different character than any other horticultural journal. Having absolutely no interest in the business and being conducted by a professor in close contact with the Arnold Arboretum the magazine gave much valuable information. When the magazine ended at the end of the tenth volume, it left no doubt about the reasons for its cessation. The staff said that the magazine "cost a lot in time and mones [sic] and experiment

---

[1]"Publishers Card," The Horticultural Art Journal, I (Jan. 1886), p. 1.

[2]Bailey, loc. cit.

[3]Ibid.

has shown that there are not enough in the U. S. interested in the subject printed to make a journal of this class and character self-supporting."[1] The magazine was directed to the educated reader rather than to the masses and there was no evidence that it tried to gain subscribers.

A more practical magazine for the amateur Meehan's Monthly--a Magazine of Horticulture, Botany and Kindred Subjects began in Philadelphia in July, 1891. This magazine was conducted by Thomas Meehan assisted by Thomas B. Meehan, J. Frank Meehan and G. M. Meehan. They stated that they wished to minister to both classes, the novice and the more experienced. To do so they pledged to give plain and practical gardening hints as well as accounts of the increase in popular knowledge.[2] Meehan's Monthly continued until 1902 when it became Floral Life.[3]

In 1892 the journal Gardening began in Chicago. The editor, William Faconer, called his journal a "plain practical paper, in plain language gotten up with the view of aiding everyone who is interested in a garden, more especially the amateur."[4] The staff declared that its teachings and opinions would be reliable, independent, and unbiased, as the magazine was not interested in selling anything.[5] Urging contributions, Falconer gave the qualifications of his staff which included

---

[1]Garden and Forrest, X (Dec. 1897), p. 518.

[2]"General Notes," Meehans Monthly, I (July 1891), p. 16.

[3]Librarian, Michigan State University.

[4]"Announcement," Gardening, I (Sept. 15, 1892), p. 3.

[5]Ibid.

Warren H. Manning, a practical landscapist. In 1925 this magazine was discontinued.

Another gardener's magazine, The Gardener's Chronicle of America, began in 1892 in New York. This monthly might be considered a trade paper, for in 1939 it was declared the official organ of the National Association of Gardeners and American Rock Garden Society.[1] This magazine was more technical in nature and was directed to accomplished gardeners. In 1949 it called itself America's foremost gardening magazine for 44 years.[2] This magazine ceased publication in 1949 after absorbing Real Gardening and Gardening Magazine.[3]

The magazine, Horticulture, began as a weekly in 1904. Volumes XXIV and XXV in 1916 and 1917 were predominantly concerned with florists' products. A new series began in 1922. Volume IV, 1926, was published in Boston by the Massachusetts Horticultural Society in conjunction with the Horticultural Societies of New York and Pennsylvania.[4] At this time the magazine stated that it dealt with all phases of gardening and that since it was in close contact with the Arnold Arboretum it might be depended upon for the latest information about novelties and important introductions. The magazine was called Horticulture Illustrated and was edited by Edward I. Farrington.[5] In January, 1955, at their 50th

---

[1]The Gardener's Chronicle, XLIII (Jan. 1939).

[2]Ibid., LIII (Jan. 1949), p. 228.

[3]Ibid.

[4]Horticulture, IV (1926).

[5]"Horticultural News Notes," ibid., (July 1, 1926), p. 295.

anniversary the editors of Horticulture, which was now a monthly, announced that they had added six pages of color. They further said that a recent reader survey had given the staff much additional information about their readers interests and they were looking forward to a most successful year. At this time Daniel J. Foley was the editor of Horticulture, America's Authentic Garden Magazine.[1]

In January, 1914, The Modern Gladiolus Grower began in Calcium, New York. This small 20-page magazine was concerned chiefly with introducing the gladiolus to more people; however, it gave some interesting information about other plants.[2] In 1918, The Modern Gladiolus Grower became Flower Grower, the Home Garden Magazine. It is edited and published by John R. Whiting in New York.[3]

In 1938, Robert Shemmon edited a digest known as Real Gardening. This magazine ended with Volume IV.[4]

An interesting 96-page digest, The Home Garden, began in January, 1943. Its Board of Editors consisted of F. F. Rockwell, Montague Free, Donald Wyman, Esther C. Grayson, Dorothy H. Jenkens, Helen Van Pelt Wilson and R. C. Allen.[5] As this magazine stated, it was born in a period of emergency and had a patriotic duty to perform in connection with the war effort. The editorials and the articles tried to impress

---

[1]Horticulture, Vol. XXXIII, p. 10.

[2]The Modern Gladiolus Grower, III (1916).

[3]Flower Grower, XLVII (June 1957).

[4]Librarian, Michigan State University.

[5]The Home Garden, I (Jan. 1943).

the readers with the importance of a victory garden, and thrift in the use of foods, fertilizer, seeds, etc.[1] Rockwell pled that the slogan "back to the land" was what society needed in peace time as well as war.[2] The Home Garden realized that the strain of the day called for recreation, and therefore stated that no phase of ornamental gardening would be neglected.[3] Throughout its career which ended in 1953, The Home Garden maintained its "dedication to the simple principle that the person or the family retaining contact with the earth, in peace no less than in war, is both the happiest and the mose secure. The earth was not a hobby, a recreation but a way of life."[4]

Two more recent publications, not included in this study, are Popular Gardening which began in 1950 and Flower and Garden, which began in January 1957. Flower and Garden calls itself a magazine for mid-America and is published in Kansas City, Missouri. Due to the short life time of these magazines and their similarity to Flower Grower neither was included in this study.

---

[1]"Thrift was the Word," The Home Garden, I (March 1943), p. 7.

[2]"For Keeps," ibid., (July 1943), p. 7.

[3]The Home Garden, I (Jan. 1943).

[4]"Earth and the Good Life," ibid., p. 9.

PERIOD OF PUBLICATION OF GARDENING MAGAZINES

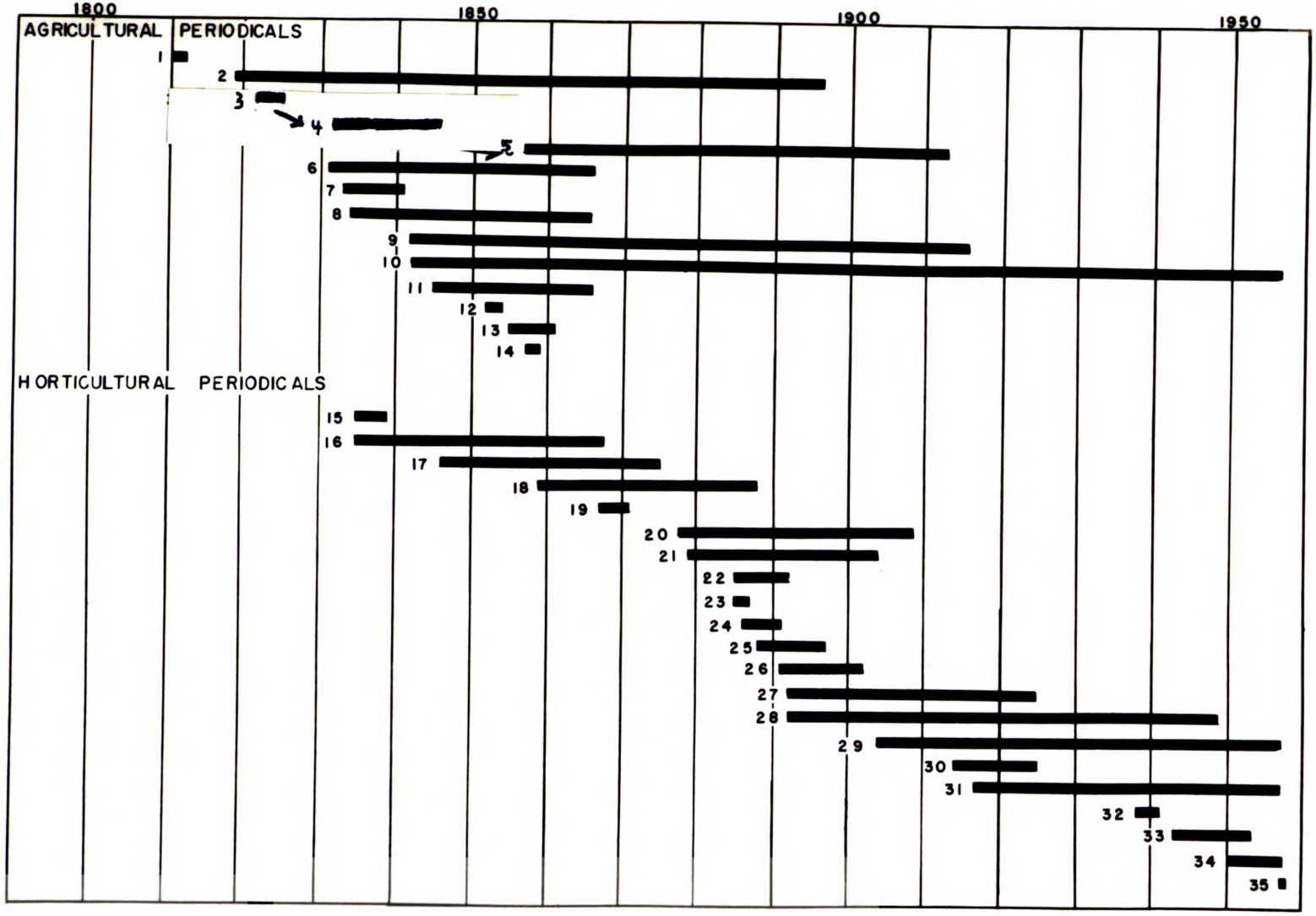
Agricultural Periodicals:

1. The Agricultural Museum 1810-1812
2. The American Farmer 1819-1897
3. The New England Farmer 1822-1825
4. The New England Farmer and Horticultural Journal 1832-1846
5. The New England Farmer 1857-1913
6. The Tennessee Farmer 1831-1866
7. The Farmer's Register 1833-1841
8. The Cultivator 1834-1866
9. The American Agriculturist 1842-1916
10. The Michigan Farmer 1842-1957
11. The Ohio Cultivator 1845-1866
12. The Farmer's Companion and Horticultural Gazette 1852-1854
13. The Ohio Valley Farmer 1855-1861
14. The Northwestern Farmer and Horticultural Journal 1857-1859

Horticultural Periodicals:

15. The Horticultural Register and Gardener's Monthly 1835-1839
16. Hovey's Gardener's Magazine 1835-1868
17. The Horticulturist 1846-1875
18. The Gardener's Monthly and Horticultural Advisor 1859-1888
19. The American Journal of Horticulture (Tiltons) 1867-1871
20. Vick's Monthly Magazine 1878-1909
21. The American Garden 1879-1904
22. Popular Gardening and Fruit Grower 1885-1892
23. The American Horticulturist 1885-1887
24. The Horticultural Art Journal 1886-1891
25. Garden and Forest 1888-1897
26. Meehan's Monthly 1891-1902
27. Gardening 1892-1925
28. The Gardener's Chronicle 1892-1949
29. Horticulture 1904-1957
30. The Modern Gladiolus Grower 1914-1917
31. Flower Grower 1917-1957
32. Real Gardening 1938-1941
33. The Home Garden 1943-1953
34. Popular Gardening 1950-1957
35. Flower and Garden 1957

PERIOD OF PUBLICATION OF GARDEN MAGAZINES



HORTICULTURAL INFORMATION IN MAGAZINES FROM 1810-1835

The early American agricultural periodicals provide an interesting picture of the beginning of horticultural information in magazines. The development of interest in the various subjects clearly shows that the settlers thought of their land primarily in terms of sustenance. During the period 1810-1835, topics such as wheat, potatoes, and sheep occupied most of the space in these magazines. Horticultural information evolved at first in minor articles concerning vegetables and fruit.[1]

Readers frequently reported their own experiences, or problems, in growing fruit trees. These articles seldom tried to give the complete culture of the fruit selected; they just reported some aspect that interested the grower. The contributors were seldom authorities in their field; instead they were unknown farmers, orchardists or botanists who thought they had something worth-while to tell. To this the editors frequently added their own opinions.[2]

The Grape

Specific horticultural information in the early American agricultural periodical magazines had its beginning in the native grape, referred to in the magazines as "the vine."[3] Grapevines, grapes, and

---

[1]The Agricultural Museum, I (1811).

[2]The New England Farmer, I (1823).

[3]B, "The Vine," The Cultivator, I (July, 1834), p. 60.

wine must have been among the important imports and the settlers constantly rebelled against this expense and dependence on France and England.[1]

Although most of the magazine material was actually concerned with the making of wine from the native grapes, the articles revealed certain cultural practices. In 1810, The Agricultural Museum, the first American agricultural periodical, reported that spring training and a horizontal arbor were the necessary factors for the successful growing of the vine.[2] Continuing to disfavor foreign vines, the article said that the native grape was "most proper to plant here" as it was resistant to the cold winters and the fruit was not as subject to blast or rot as were the foreign grapes.[3] The early articles on "the vine" actually gave little practical information. Concerning environmental factors, the author merely stated that the plants should be placed where they would get "full benefit of the soil, the sun, and the air."[4]

By 1819, the promotion of the grape had reached such a stage that The American Farmer carried a complete series concerning the making of wines and brandies. No other fruit was awarded such distinction.[5] By the 1830's, some native grapes had been discovered whose fruits compared more favorably with those of the foreign grape. The "Isabella,"

---

[1]Joseph Cooper, "On the Manner of Making Wine from the Native Grape and the Advantages to be Derived from Its Cultivation," The Agricultural Museum, I (Sept. 12, 1810), pp. 92-93.

[2]Ibid., p. 93.

[3]Ibid., p. 92.

[4]Ibid., p. 93.

[5]The American Farmer, I (1819).

the white scuppernong, and the "Catawba," were said to be the best. Growers strongly recommended that no animal manures be placed around the roots; however, decayed vegetable matter, lime, and ashes were considered excellent.[1] Fertilization was a matter of utmost importance when so little was known about plant breeding and many felt that proper cultivation was all that the native grape needed to equal the quality of the foreign grape.[2]

As The Farmer's Register expressed it, "the grape was the most generally esteemed fruit" of this period.[3] The apple perhaps followed the grape in individual importance; however, fruit trees were discussed in very general terms. Methods and practices were often recommended for the orchard, without reference to a specific fruit.

Fruit Trees

Pruning was recognized as a practice of great consequence as early as 1810. It was said to double the life of a tree and to cause it to fruit earlier.[4] After much debate the writers seemed to agree that trees should be pruned annually between May and April 10th, when the sap was active. Although some felt that the excess bleeding from the wounds at this time was harmful, it was generally accepted that the

---

[1]Edmund F. Noel, "Native and Foreign Grapes," The Farmer's Register, I (Jan., 1834), pp. 454-459.

[2]B, "The Vine," The Cultivator, I (July, 1834), pp. 60-61.

[3]Noel, loc. cit.

[4]Thomas Skip Dyot Bucnall, Esq., "Observations Relative to the Pruning of Orchards," The Agricultural Museum, I (Nov. 23, 1810), pp. 167-171.

wounds would heal more rapidly.[1] In the pruning operation writers stressed the necessity of going back to the forks of the limb, making a smooth cut, and leaving no stump.[2] The dangers wounds presented to the trees were fully recognized in 1810 as they are today. Among the many interesting applications for wound coverings was a substance known as medicated tar. It consisted of one-fourth ounce of powdered corrosive sublimate dissolved in a glass full of gin or other spirit. This was put into a three pint earthen pipkin which was later filled with vegetable or common tar. This amount was said to be sufficient for two hundred trees.[3] A London recipe called for three parts of powdered chalk or brick dust to one part vegetable tar.[4]

Many writers placed great importance on pruning. One stated that he hoped pruning would become as general as hoeing; he felt sure that it was as necessary. The objective of the pruning in those days was a circular range of evenly spaced branches, with all ends pointing outward and a little upward. The writer felt that this equal distribution of sap would lead to more fruit.[5]

The thorough discussion of pruning was evidence of the general feeling that many neglected to practice it. Writers advised the growers to remove only the small branches. They advocated "judicious" pruning

---

[1]"The Farmer's and Gardener's Remembrance," The New England Farmer, I (March 29, 1823), pp. 289-290.

[2]Bucnall, loc. cit., p. 170.

[3]Ibid., p. 171.

[4]Earl Stanhope, "Composition for Healing Wounds in Trees," The Agricultural Museum, I (April 3, 1811), pp. 314-317.

[5]Bucnall, The Agricultural Museum, I (Nov. 23, 1810) pp. 167-171.

and emphasized the fact that this did not include shortening the branches. It was entirely a thinning operation, which would allow the sun to reach all the branches and improve the tree's figure.[1] One contributor's sentiment was reflected in the following statement: "The best compliment your neighbor can make is that your trees are handsome, but too thin of wood."[2]

Pruning was recommended also to rejuvenate old orchards. In the case of peach trees, "going backward from age" The New England Farmer advised that the whole top above the roots or at the first branching limbs be removed.[3] In 1790 this practice was followed on an orchard planted in 1772. The writer had observed great improvement by 1810 and added as a general rule for pruning, the removal of any limb that might be in the way in three years.[4] Fruit thinning was recommended on heavily laden branches especially for the peach, the nectarine and the apple.[5]

The early horticulturists derived much of their information from trying various practices and observing the results. Although more such experiments were recorded in magazines after 1835, there were quite a few before this time. By comparing the flowering season for the various

---

[1]Ibid.

[2]Ibid., p. 169.

[3]"On Shape of Trees and Pruning," The New England Farmer and Horticultural Journal, X (July 20, 1831), p. 1.

[4]Bucnall, loc. cit., pp. 167-171.

[5]"The Farmers and Gardeners Remembrance," loc. cit., (July 19, 1823), p. 407.

fruits over a period of ten years, in 1822 it was decided that the earth temperature had to reach a given point for the flowering of each particular fruit tree. From this evolved the practical rule "when the apple tree flowers we may safely venture to put our corn, squash, and melons into the earth."[1] The late flowering apple trees seem to guarantee that the danger of frost was past.

Frost injury was common for the fruit trees. Mulches, which are used for winter protection today, were not recommended for that purpose then as they harbored field mice who often girdled the fruit trees. In case of this, a preacher suggested that by "connecting the under and upper lips of the bark with a suitable number of scions," a girdled tree might be preserved.[2] Although this method of grafting proved successful, earlier writers thought it simpler to remove the mulch each autumn. It seems that the mulch, commonly of straw or hay, was first used in America to keep the ground cool and moist in the summer.[3]

Insects

Insect remedies provided the topic that could get anyone's name in print. Everyone wrote about his special treatment and the editors, realizing the seriousness of the problem, thus seemed to include all of them in the magazines. Many of the applications were simple; however, they caused one to wonder how the fruit trees survived at all.

---

[1]"Comparison of the Present with Some Past Seasons," The New England Farmer, I (Aug., 1822), p. 2.

[2]Rev. Abiel Abbot, "Fruit Trees," The New England Farmer, I (Nov. 30, 1822), p. 141.

[3]Ibid.

Among these were the practices of pouring boiling water, lamp oil, or fish oil around the roots to protect the tree from the caterpillar and canker worm.[1] Writers also advised the reader to eliminate the worms by gathering the eggs and destroying them between January and April.[2] A mixture of soap suds and oil sprinkled on the tree was said to keep the insects from settling on the tree. Another antidote was a lye or brine wash to kill the orchard lice. The brine consisted of a quart of common salt to two gallons of water.[3] A farmer's letter reported the following substance to have "great utility against frost and insects."[4] His recipe included boiling tobacco in strong soap suds until the solution became reddish-brown. To six quarts of this he added one quart of strong beef brine and then proceeded to wash the trunk and large limbs of the tree. The part that fell on the soil served as a "most powerful manure" that would force the fruit on your trees. He said this should be done three times between February 15th and April 6th.[5] These explicit directions were common in articles of this type; the writers simply described what they had done. Dusting the trees with lime and woodash was reported to be more expensive and not as long lasting as the previously mentioned method.[6]

---

[1]General Dearborn, "Caterpillars," The American Farmer, X (June 6, 1828), p. 94.

[2]"Fruit Trees," The Agricultural Museum, II (March, 1812), p. 283.

[3]"The Farmer's and Gardener's Remembrance," The New England Farmer, I (May 17, 1823), pp. 333-334.

[4]J. Willis, "Letter from a Farmer," ibid., II (March, 1824), p. 277.

[5]Ibid.

[6]"The Farmer's and Gardener's Remembrance," loc. cit.

The ravages of insects presented a bewildering problem to the settler. The editors of The New England Farmer explained it by saying that "the climate and soil of late years has increased insects."[1] Today's knowledge of the multiplying rates indeed would have frightened these people. Their use of the effective tobacco, oil, and soap without additional material killing most of the plants remains a miracle.

Peach Trees

Interest in the peach tree itself developed in the magazines as insects threatened the crop. Anxious to check the ravages of the insects, the magazines reported many cultural practices that might help in some way. This resulted in the more complete cultural information about the peach than any other crop except the grape.

The Agricultural Museum in 1811 stated that the peach tree was "liable to three casualties." These were the fly, the bursting of the bark by frost and the splintering of limbs at the fork.[2] Attacking the peach fruit as well as the plum was the curculio worm which the editors said was a problem from Maine to Georgia.[3]

In hopes of conquering these troubles, specific instructions were given. Many felt the stock upon which the peach was budded played a part in the fight against the insects; however, the articles show that

---

[1]"The Peach Tree," The Agricultural Museum, I (Feb. 20, 1811) pp. 259-260.

[2]Ibid.

[3]"Peach Trees," ibid., II (Dec. 1811), p. 192.

no one was sure exactly what stock was best. The Agricultural Museum named plum stock as a certain remedy, but said that almond was also good. In budding, or inoculating, as it was frequently called, the editors recommended that the stock be left five-six inches long.[1] A later issue of this same periodical stated that cherry or persimmon stock should be used, and that the stock should be left at least 18 inches long.[2] Such different recommendations were common; failing to know the right answer, the settlers were willing to try anything.

By planting in poor soil on the northern side of a slope, readers were told that they might avoid frost injury.[3] Orchardists of the 1800's recognized the value of transplanting the trees while they were young. A Pennsylvania writer stated that to be sure of no check in growth, the trees should still be in the kernel. The writers agreed that the trees, planted 16 feet apart, should be cut off at ground level the third spring.[4] This would give a well established root system, before budding took place. To avoid a top-heavy tree The American Farmer said only four to six limbs should be allowed.[5] To further combat the worm that attacked the tree at ground level, readers were advised to tie coarse linen cloth around the base of the tree in the spring and let it extend three inches below ground level. Other cautions, particularly

---

[1]Ibid., I (Apr. 3, 1811), pp. 318-319.

[2]Ibid., II (Dec., 1811), p. 192.

[3]Ibid., (Jan., 1812), p. 215.

[4]Thomas Coulder, "Peach Orchard," The American Farmer, I (March 17, 1820), pp. 406-407.

[5]Ibid.

for the peach, included a warning not to put manure around them. This was said to cause premature decay and later ripening of the fruit which remained green.[1] The Genesee Farmer was the only magazine that recommended putting manure around fruit trees.[2] These are only a few of the many cultural practices various writers recommended for the successful growing of peaches.

Apple Trees

In contrast to this, individual interest in the apple developed with an economic and patriotic slant. Apples gave the settler another source of protest against imports. The Agricultural Museum proposed cyder [sic] as another substitute for foreign wines.[3] "It is certainly of great importance to the people of America to cultivate the fruit that is natural to the soil of their country, and to make the most of the fruit which the soil produces; especially when it produces an article of value, and of great consumption in this country."[4] Apples from a 100-300 acre orchard were said to be worth $75.00-$250.00 at a distillery and more if the owners made their own cyder [sic].[5] The nutritional value of the apple was also stressed. The writers evidently felt facts such

---

[1]John Ellis, "Account of a Method of Preventing Premature Decay of Peach Trees," The Agricultural Museum, II (Jan., 1812), p. 212.

[2]"Fruit Gardens," The Genesee Farmer, III (Dec. 21, 1833), p. 408.

[3]"Queries addressed to the Editor of The Agricultural Museum," The Agricultural Museum, I (Sept. 27, 1810), p. 98.

[4]"On Cider," ibid., (Nov. 9, 1810), p. 160.

[5]"Queries addressed to the Editor of The Agricultural Museum," loc. cit.

as these more pertinent to the promotion of the apple than practical growing rules.

The exception to this economic interest was a short article of the propagation of the apple. The President of the London Horticultural Society, T. Andrew Knight, in a letter to The American Farmer, reported that an apple plant from a root cutting of the "Ribstone Pippin" variety was superior to a seedling plant of that variety, and he recommended the use of root cuttings to propagate the apple, the plum, the cherry and the pear.[1]

Pear Trees

From 1810 to 1835, the pear tree received notice mainly because of the strange disease which attacked a seemingly healthy tree in spring and by fall had turned its leaves black and its limbs a rusty iron. A complete mystery surrounded the action of this disease. It was given every description; however, the disease was never understood. A little later it became known as fireblight, and today the knowledge of bacterial diseases has fully explained the behavior of the infected tree. Even without this knowledge many recommended that the only cure was to destroy the tree. The disease prompted horticulturists to advocate propagation by seed from outstanding trees. These seedlings were said to bear after 12-15 years and to live for 100 years.[2] If a vegetative

---

[1]T. Andrew Knight, "Upon the Advantages of Propagating from the Roots of Old Ungrafted Fruit Trees," The American Farmer, I (May 7, 1819), pp. 45-46.

[2]"The Pear Tree," The Agricultural Museum, II (April, 1812), pp. 290-292.

method of propagation were used, growers were warned to be sure "the cutting for engrafting is in a state of healthfulness and not of the old worn-out kinds."[1]

Other Fruits

The peach, the apple, and the pear were not the only fruit trees grown; however, except for variety names there was little information about these other types of fruits. On the subject of grafting, The New England Farmer mentioned that plums, peaches, nectarine, apricots, and almonds would all grow on the wild plum stock. The wild hawthorn was recommended for the pear and the apple.[2] Actually the possibility of a successful union of some of these is doubtful today. In general espalier fruit trees were frowned upon as being a little too foreign during this period. Writers did consent to tell a little about their training; however, these exotics did not gain prominence in the magazines until after 1835.[3]

The grape took almost all of the attention given small fruits. Strawberries were of some consequence; however, deep interest in them did not develop until the second period. The argument about the sexual character of the strawberry plant began around 1820 but remained mild until 1835. In 1819 The American Farmer cautioned readers to take care

---

[1]Ibid., p. 291.

[2]"Fruit Trees," The New England Farmer, I (Dec. 7, 1822), p. 152.

[3]"For the Month of July," The American Farmer, I (July 9, 1819), pp. 119-120.

in selecting their plants. It stated that the variety, "Hautboy," was more subject to becoming all male plants, thereby bearing no fruit, than any of the other six principal varieties.[1] In 1832, the price of strawberry plants varied from seventy-five cents a dozen to one dollar for a hundred, according to the variety bought.[2] Other small fruits such as raspberries and gooseberries were only mentioned.[3] They were of such minor importance that the competition of other subjects in the agricultural periodicals gave them no space.

The Hedge

Until now, major interests have been confined to plants which furnished an edible or a saleable product. Running parallel to this development was a great interest in plants for their value as a hedge. The requirements were that the hedge be "impervious to black cattle" and also to hogs.[4] Various types of hedges were compared as to their hardiness, value for this purpose, and their price. In a series of detailed articles a writer compared the price of a common oak rail fence and that of a live thorn fence. He concluded that "the balance in favor of live fence at the end of seven years enclosing a farm of 100 acres would be $840.00."[5]

---

[1]Ibid.

[2]"Strawberry Plants for Sale," The New England Farmer and Horticultural Journal, X (Aug. 31, 1831), p. 54.

[3]"Nursery for October," The American Farmer, I (Oct. 22, 1819), pp. 233-234.

[4]Thomas Main, "On Hedges," The Agricultural Museum, II (March, 1812), pp. 269-274.

[5]Caleb Kirk, "On Hedging," The American Farmer, I (March 24, 1820), p. 413.

Writers argued about which kind of shrub was best for this purpose. The English white hawthorn was said to be the best of all kinds of plants for a hedge. It was referred to as "the thorn."[1] The Honorable John Quincy stated that the Virginia thorn was hardier and more adaptable to the American climate than the English thorn.[2] The pyracantha or burning bush was described as a beautiful evergreen thorn which made an excellent hedge.[3] Other plants, now considered ornamentals, that were recommended for this "live fence" were the Cherokee rose, the dog rose, the pomegranate, the Black Haw or Viburnum and the Blueberry. Arborvitae and cedars were mentioned also, however, plants having thorns were preferred. Among the wild plants which the writer stated were more permanent and required less care were the brambles and the plum.[4]

In spite of the importance the settler placed on the hedge and the large number of articles concerning the hedge, very little was mentioned about the care these plants should be given. In 1833 a writer recommended that these live fences be planted in full sun in October or November and sheltered for three years until the plants became strong.[5] Pruning was extremely important to form a good hedge. It was recommended that they be cut very near ground level so that they would thicken up.[6]

---

[1]George Tibbets, "On the Cultivation of Live Fences," The New England Farmer, III (Aug. 28, 1823), pp. 31-33.

[2]"Massachusetts Agricultural Repository and Journal for June," The New England Farmer, I (Aug. 3, 1822), p. 2.

[3]Tibbets, loc. cit.

[4]Dr. Joseph Johnson, "On Hedges," The Farmers' Register, I (Aug., 1833), pp. 144-146.

[5]Ibid.

[6]Kirk, loc. cit.

The interest in the hedge represents the first large indirect interest in any ornamental plant. The writers did not feature the hedge as an ornament; however, some of them mentioned casually that it would add to the appearance of a farm or garden.[1]

Forest Trees

In these magazines interest in the cultivation of forest trees lagged far behind that of hedges. The articles about trees were most insignificant in comparison. The editor of The New England Farmer gave the earliest boost to the use of forest trees in 1823. He reported that the sugar maple was by far the best of the forest trees. He advised readers that it was better to buy the young trees from a nursery than to dig them from the woods. The editor gave the settler a reason to grow these trees; he stated that three acres of sugar maples, planted 48 trees to the acre, would furnish 600 pounds of sugar, an amount sufficient to supply one family. Concerning oaks, the editor advised that the acorns be gathered in the autumn and allowed to sprout in a box of sand before they were planted, a procedure similar to after ripening.[2]

Methods of propagation were discussed briefly. Articles in The American Farmer, perhaps more properly called notices, especially attempted to encourage tree-growing in this manner. This magazine reported that the sugar maple, the beech, the ash, the black walnut,

---

[1]Johnson, loc. cit.

[2]"On Forest Trees," The New England Farmer, I (April 26, 1823), pp. 305-306.

and the elm might be grown easily from seed.[1] It also stated that seeds produced better timber trees than cuttings.[2] White sand was said to be the best medium for rooting cuttings of trees and shrubs as it prevented mouldiness [sic].[3] Readers were advised that October was the best time for layerage. A rather incongruous group, "Elms, limes, most hardy forest trees and flowering shrubs" were said to root easily in the spring following the storage of winter moisture.[4]

Information in The New England Farmer was concentrated on planting the trees. For a young 3- to 4-year-old tree, a hole three times the width of its roots and six inches deeper than the longest root was recommended. This alone sounds foreboding; however, the editors, while stressing the fact that the roots should not be damaged, recommended that they be cut back to a length of one foot. The day previous to planting, six inches of mould [sic] should be sifted into the hole. If the rest of the soil used around the plant should be a light soil, the writer advised that small stones should be mixed with it to keep the roots firm.[5]

Watering the newly planted plant was strictly forbidden during this period. "Do not water by any means. Water, poured on, in this case,

---

[1] J. B., "Forest and Ornamental Trees," The American Farmer, X (Nov. 21, 1828), p. 283.

[2] "Nursery for October," loc. cit.

[3] Thomas Haines, "On the Use of Sand," The American Farmer, X (Jan. 9, 1829), pp. 339-340.

[4] "Nursery for October," loc. cit.

[5] "The Farmers and Gardeners Remembrance," The New England Farmer, I (April 19, 1823), p. 301.

sinks rapidly down and makes cavities amongst the roots; lets in air; mould [sic] and canker follow; and great injury is done."[1] The same article stated, however, "a new but elligible practice" for extreme dry conditions was throwing two to three pails of water into the hole the day before planting.[2] Although other articles said that occasional watering would not harm the plants, watering was not generally recommended.

Concerning the question of autumn or spring transplanting, however, the opposing results only inflamed the argument, which became very strong after 1835. The American Farmer in 1819 thought autumn by far the best.[3] A few years later The New England Farmer acknowledged that the time of planting varied with the locality--in Pennsylvania they recommended spring; in Massachusetts fall was preferred.[4] Today the reverse of this practice is commonly accepted; in colder climates planting is done in the spring. Their arguments may easily be understood, however, for it is now realized that most plants may be moved successfully at any time if they are given the proper care.

Garden Plants

Much of the information concerning ornamental plants was taken directly from foreign periodicals or books. Many of these early

---

[1] Ibid.

[2] Ibid.

[3] "Nursery for October," loc. cit.

[4] "The Farmers and Gardeners Remembrance," loc. cit.

agricultural magazines featured a garden calendar which told of the duties of the month in respect to the kitchen garden, nursery, and flower garden. It also contained bits of information about various plants. The calendar in The American Farmer was taken directly from the book, The American Gardener. In a July, 1819 issue the writer pointed out that it was time to separate the Venus Fly Trap.[1] A June issue stated that many of the evergreens, such as the common Jassamine [sic] and trumpet flower, could be propagated by layerage easily at that time for the soft wood would "freely emit the roots."[2]

This information, although in many cases too brief to be of a great deal of help, was particularly significant for its timeliness. During the years 1810-1835, timeliness seldom was a property of the article in the agricultural periodicals. The June issue recommended that annuals be transplanted on a cloudy day and that perennial and biennial seedlings as Sweet Scabiosa, Canterbury bells, and Sweet William be moved to their permanent position.[3] Such information as this constituted the major portion of ornamental information at this time.

Even the rose, which one would presume to have been the flower of *the* day, rated little concern. Other than poetry in the ladies' departments and descriptions of varieties, early interest in the rose developed as the rose bugs became obnoxious. For these, the flambeau stick

---

[1]"For the Month of July," The American Farmer, I (July 9, 1819), pp. 119-120.

[2]"For the Month of June," ibid., (June 4, 1819), pp. 76-77.

[3]Ibid.

furnished a method of self-destruction.[1] In 1828, The American Farmer reported that a well-drained, fresh soil was suitable for growing roses. Other "rose-news" worthy of comment at this time dealt with varieties or types: the moss rose was rare; the yellow rose would not flower; and there was no true black rose.[2]

Among the other flowering plants that were mentioned specifically in these volumes were the tulips, narcissi and hyacinths. It was recommended that they be planted in late September in sand with a three-inch mulch of leaves for the winter.[3] The color change of the hydrangea was reported solved by Loudon's Magazine of London. The New England Farmer did not completely accept this solution, that iron oxide in the soil caused the hydrangea to turn blue, but advised its readers to try it.[4] In the 1830's introductions from California began to gain interest. Of these Eschscholtzia Californica, the California poppy, was given wide acclaim.[5]

This information about ornamentals may seem insignificant and relatively speaking, it was. It marked the beginning of an interest which spread widely and rapidly in American magazines after the year 1835 witnessed the publication of two horticultural magazines.

---

[1] "On a Mode of Destroying Insects," The New England Farmer, I (June 28, 1823), p. 379.

[2] "Roses," The American Farmer, X (March 28, 1828), p. 11.

[3] "Hyacinths," The New England Farmer and Horticultural Journal, X (Oct. 26, 1831), p. 116.

[4] "Hydrangia Hortensis," ibid., (June 20, 1832), p. 389.

[5] D. T., "New Ornamental Plant," The Genesee Farmer, III (April 27, 1833), p. 130.

Recalling the conditions previous to this time when the American had just gained his independence and was fighting to survive, it may be said that first things came first, and beauty was of little consequence.

HORTICULTURAL INFORMATION IN MAGAZINES FROM 1835-1860

Horticultural information in magazines during the years between 1835 and 1860 was definitely of a different character than the earlier 19th Century information. Although many practices remained the same, interest in the various horticultural crops shifted considerably.

The emergence of two horticultural magazines was responsible for this change. They were Hovey's Gardener's Magazine and The Horticultural Register and Gardener's Magazine. Devoted completely to horticulture, these magazines naturally contained a wealth of material that had been lacking so noticeably in the earlier agricultural journals. As the agricultural periodicals after 1835 drew heavily on both of these magazines, their horticultural information changed in a similar manner.

The birth of these two magazines gave additional authority to information as they had regular contributors, many of whom were experts in the field. Nurserymen, such as Joseph Breck, William Prince, and E. B. Kenrick sent in interesting articles, which gave the reader valuable knowledge and incidentally, gave their nurseries a little free publicity. Botany professors, gardeners of well-known estates and authors of horticultural books were frequent contributors.[1] These men reported their observations and experiments and the readers could evaluate the recommendations in terms of the reputation of the writer.

Hovey, in his Magazine of Horticulture, attributed the present increase in interest in horticulture to the establishment of State

[1] Magazine of Horticulture, X (1845).

Horticultural Societies and their communications with Great Britain.[1] After 1835, the magazines reflected the American as being more accustomed to his independence. Although the use of native plants was still encouraged, the desire for exotic introductions and knowledge of foreign practices was acknowledged. In many ways the end of the extreme resentment toward Great Britain turned the unsure people who seemingly had remained colonists long after their independence, into people of a united nation that was part of a large world.

Native Plants

To increase the gardener's use of native plants, Teschemacher said that they were the pride and ornament in Europe.[2] Hovey lamented the fact that the large number of indigenous plants were overlooked due to the exotics.[3] This was blamed partially on the nurseryman's failure to supply native plants.[4] Hovey encouraged the use of both, cautioning readers that some exotics, referring especially to the Oriental ones, were not well adapted to this climate.[5]

Of the native evergreens, Kalmia, Rhododendron, and Andromeda were said to equal the exotics in beauty.[6] It was recommended that young

---

[1] C. M. Hovey, "Introduction," Magazine of Horticulture, I (1835).

[2] J. E. Teschemacher, Esq., "On the Preservation and Cultivation of the Indigenous Plants of North America," Magazine of Horticulture, I (Jan. 1835), pp. 12-13.

[3] Ibid.

[4] Henry W. Sargent, "Evergreen Shrubs," The Horticulturist, X (May, 1855), pp. 205-207.

[5] Ibid.

[6] Ibid.

shrubs with a ball of earth attached to each, be bought in April and planted in good soil in a shady location. These should not be over two feet high.[1] Kenrick emphasized the need to cultivate the wild herbaceous plants. Among those growing near Boston he reported that the columbine, the Hepatica, the Cymbidium, the yellow snap dragon and the aster were easily grown in the garden.[2]

Mr. Munn, a landscape architect, said the following exotics were hardy near New York, if protected by evergreen bough for their first two winters. Among these were Mahonia, the English and Irish yews, Box wood, and the Deodar cedar.[3] Evergreens had reached a position of vast admiration; of many others that were discussed the Southern Magnolia grandiflora, which was said to be hardy in Philadelphia, was most prized.[4]

Trees

The argument about transplanting trees continued. To the earlier questions: when is the best time? should the plant be watered?, a new one was added--how deep should the tree be planted? Many felt that planting too deep resulted in a sickly plant, because of poor aeration. A writer to The Gardener's Monthly criticized A. J. Downing, the horticulturist, for advising that trees be planted in holes two feet deep.[5]

---

[1] "Native Shrubs," The Horticultural Register and Gardener's Monthly, I (Jan., 1835), p. 20.

[2] E. B. Kenrick, "Beautiful Plants Growing Wild in the Vicinity of Boston," Magazine of Horticulture, I (Oct., 1835), pp. 368-377.

[3] B. Munn, "Evergreen Shrubs," The Horticulturist, X (March, 1855), pp. 123-126.

[4] William Sanders, ibid., (April, 1855), pp. 162-166.

[5] William Bright, "Shallow Planting of Trees," The Gardener's Monthly, II (Jan., 1860), pp. 4-6.

Some maintained the radical view that trees should be planted on the surface, with the soil drawn up about them.[1] The New England Farmer and Horticultural Register recommended planting the tree at the same depth at which it had been previously growing.[2] To combat the wet subsoil which was thought to cause the root to stop growth, the writers recommended that eight inches of stones and brush be placed two to three feet deep below the tree.[3] This magazine took a wise stand on many issues. It even conceded that an evergreen might be watered after transplanting.[4]

The Horticulturist reported that deciduous trees were easier to transplant than evergreens.[5] Downing said that America should copy English parks and preserve the trees instead of destroying them. Among the trees he recommended for parks were the oak, the poplar, the Kentucky coffee tree, and the cypress. He also recommended the use of such exotics as the larch, the ash, the beech, and the Japanese Maiden hair tree.[6]

New methods of propagation of trees were given. The Horticulturist reported that the new Japanese ornamental, Paulownia, would grow from a

---

[1]"Practical Hints to Amateurs," Ohio Cultivator, V (Jan. 1, 1849), pp. 9-10.

[2]"Transplanting," The New England Farmer and Horticultural Register, XX (Oct. 6, 1841), p. 109.

[3]"Effect of a Wet Subsoil on Trees," ibid.

[4]"Transplanting," ibid.

[5]William Saunders, "When and How to Plant Trees," The Horticulturist, X (Nov. 1855), pp. 495-498.

[6]A. J. Downing, "On the Employment of Ornamental Trees and Shrubs in North America," Magazine of Horticulture, I (Dec., 1835), pp. 444-452.

single bud, removed in the spring and planted in a hotbed.[1] In 1842 air layerage, as it is known today, was reported to be a successful method of propagating many trees. This spring-time operation consisted of injuring the bark of a thrifty shoot and binding it with fine rich mould [sic] covered by a cloth.[2] The knowledge of plants had increased greatly in many areas.

The Rose

The rose was the queen of the flowering plants during this period. A classification system of eleven botanical classes was proposed in 1835; however, it was entirely different from today's system.[3] Among the roses were hybrid perpetuals, especially the variety, "Prince Albert,"[4] the moss, the Damask, the Austrian Briars, the Hybrid Bourbon, and the Hybrid Chinese. By 1847 there was a list of a total of 1,253 varieties of roses. The writer cautioned growers that many of these were not worthy of cultivation.[5]

There were not many new developments in the culture of the rose. The climbing roses were commonly laid on the earth during the winter

---

[1]"The Two New Ornamental Trees," The Horticulturist, I (July, 1846), pp. 15-18.

[2]"A New Method of Producing Choice Trees," The American Agriculturist, I (May, 1842), p. 38.

[3]"On Roses," The Horticultural Register and Gardener's Magazine, I (1835), pp. 453-458.

[4]"Climbing and Pole Rose for Hardy Culture," The Horticulturist, I (Oct. 1846), pp. 173-174.

[5]Dr. Valk, "Remarks on Roses," ibid., (Jan., 1847), pp. 305-309.

for protection.[1] A radical method of propagation that was reported successful in 1845 required that the rose cuttings be placed in pots in the full summer sun and watered six times a day.[2] Some felt that budded or grafted roses were shortlived plants because of the "degenerating influence of the briar in their nature."[3] The briar referred to the stock plant which was usually the dog rose or a type called the "manetti" variety.[4] Hovey called this the latest freak talk.

Insects were still of great concern; however, the only new cure was an English aphis brush with which one brushed the insects off the rose bush into hot water.[5] For a fertilizer, 2 1/2 ounces of guano and one quart of charcoal dust were recommended to be placed in the hole before planting. Such a practice as this is what Hovey called the popular theory of special manures. He criticized it vehemently.[6]

Garden Flowers

The magazines gave accounts of the complete culture of the most important flowers of this period. Among these were the dahlia,[7]

---

[1]Charles Robinson, Esq., "On the Cultivation of Prairie Roses," The Michigan Farmer, III (March, 1846), p. 191.

[2]C. J. W.,"Striking Rose Cuttings," The Horticulturist, X (Dec. 1855), p. 566.

[3]Thomas Meehan, "Budded Roses," ibid., (Jan. 1855), p. 19.

[4]Ibid., pp. 18-21.

[5]"Aphis Brush," The Horticulturist, X (Oct, 1855), p. 481.

[6]"Guano as Applied to the Rose," ibid., I (Aug., 1846), pp. 87-88.

[7]S. B. Noble, "Cultivation of the Dahlia," The Michigan Farmer, III (April, 1845), p. 11.

the hollyhock,[1] the phlox species,[2] and the lily.[3] Lists of species and varieties were also given.

The following information reflects the strenuous practice of the gardener of this period. Dahlia cuttings were said to form freer flowering plants than divisions of the tuber, as the plants raised from cuttings were not as woody.[4] A great deal of interest in the hollyhock revolved around attempts to propagate it by seedlings, and thereby improve the varieties.[5] The common garden phrase, "the earth should move like an ash-heap," was used to describe the type soil necessary for the hollyhock.[6] This intensive culture of flowers was typical of the day. Everything had to be perfect.

Spring bulbs continued to hold a great deal of interest, especially the fragrant ones.[7] The trenching process was recommended for them as well as for other plants. Trenching consisted of removing the soil from the entire bed (commonly 4' x 30') to a depth of two and one-half feet. Six inches of rotted manure were then placed in the bottom of the trench and two feet of compost put in on top of this. The intricacies

---

[1]"The Hollyhock," Magazine of Horticulture, XX (Aug., 1854), pp. 363-379.

[2]Joseph Breck, " A Chapter on Phloxes," The Horticulturist, I (Sept., 1846), pp. 122-127.

[3]Breck, "On the Cultivation of the Lily Tribe," ibid., (Aug, 1846), pp. 66-70.

[4]Peter Mackenzie, "On the Cultivation of the Dahlia," Magazine of Horticulture, I (May, 1835), pp. 172-174.

[5]"The Hollyhock," Magazine of Horticulture, XX (Aug., 1854), pp. 363-379.

[6]Ibid., p. 370.

[7]"Hyacinths," The Horticultural Register and Gardeners Monthly, I (Jan., 1835), p. 67.

of the operation continued, however, for at each six-inch interval a handful of sand had to be placed. This was for each tulip bulb. The writer reassures the reader that next year he will only have to replace part of this soil.[1]

Gardeners were advised that bulbs of the popular Gladiolus Natalensis should be placed on their sides, "to prevent the wet from penetrating their hearts."[2] Hovey tried to promote the popularity of the chrysanthemum; he said prejudice made them common, when they should be highly valued.[3] English admiration for the pansy, violet, or Heart's-ease had spread its fame throughout America.[4]

Among the other garden flowers commonly recommended were Sweet peas, Stock, Marygold [sic], Petunia, Hibiscus, Coreopsis, Jacobea, Browallia,[5] Cleome, Zinnia and larkspur.[6] Flowers especially recommended for the pleasure garden were Campanula, Verbena, Nicotiana, Salvia, Iberis, Lobelia Clarkia.[7]

Flowering Shrubs

Flowering shrubs played a minor part in the development of ornamental horticulture in magazines. The reason for this is quite simple.

---

[1]J. W. Russel, "On the Cultivation of the Tulip," Magazine of Horticulture, I (Nov., 1835), pp. 408-411.

[2]S. Sweetser, "Remarks on the Management of Gladiolus Natalensis," ibid., (Feb., 1835), p. 55.

[3]C. M. Hovey, "On the Cultivation of the Chinese Chrysanthemum," ibid., (April, 1835), pp. 138-146.

[4]S. Walker, "On the History and Cultivation of the Viola tricolor, Pansy violet, or Heart's-ease," ibid., (Jan., 1835), pp. 17-19.

[5]The Horticultural Register and Gardener's Monthly, I (1835), p. 455.

[6]Ibid., p. 412.

[7]Ibid., p. 416.

Hovey stated that until 1853, all of the common ones were thought to be greenhouse plants. The tree paeony [sic] the camellia, the Japanese magnolia, and the wisteria vine were discovered to be hardy accidentally. Other flowering shrubs that were first known as greenhouse plants included Spirea prunifolia, Weigelia roses, Forsythia viridissima, Deutzia gracilis, and Jasminum nudiflorum.[1]

In the 1850's numerous double flowering fruit trees were brought to America. Of these, the double crimson-flowering peach and the double white-flowering almond seemed most popular. The Horticulturist stated that these two were just as hardy as the common peach and required the same treatment as the peach. Their special value, the magazine said, was in their colors.[2]

Other fruit trees used commonly as ornamentals were the dwarf espalier, and the pyramid. The merits of these types were often questioned; however, they became very popular. The American Agriculturalist expressed the sentiments of many when it stated that "the sooner gentlemen give the espaliers up for standards the better."[3] It was recommended that branches of the espalier or pyramidal tree be replaced by side-grafting rather than bud grafting. In this process a shoot from a lower limb was trained upward and attached to the main trunk at the point where the branch was desired. After the union was

---

[1]"Progress of Horticulture for 1853," Magazine of Horticulture, XX (Jan., 1854), p. 10.

[2]"The Double Crimson-Flowering Peach and Double White-Flowering Almond," The Horticulturist, X, (May, 1855), pp. 204-205.

[3]"Espaliers," The American Agriculturist, X (Jan., 1851). p. 29.

complete, the stem from the shoot's point of origin to the trunk was removed.[1] Pyramidal trees were more popular than the espalier.[2]

Deep rich soil was recommended for all types of dwarf fruit trees, as it was said the roots would not wander far since it was unnecessary to seek nourishment in such a soil. Other recommendations especially for the pear included the applications of phosphate of lime in the form of bones mixed with wood ashes.[3] Growers were cautioned to select varieties that had proved durable on quince stock and to select trees one-year-old from bud that had been pruned correctly. The editor of the horticulture department of The Farmer's Companion and Horticultural Journal, J. E. Holmes, criticized the nurseries training of these dwarf fruit trees, insisting that the French mode of training was the only correct one.[4]

Fruit

The magazines were very anxious for the gardeners to select the best available variety of the different fruits for cultivation.[5] Hovey stated that many people were prejudiced against the new varieties, without knowing their merits. Opposed to these conservatists were the

---

[1]Samuel G. Perkins, "Treatment of Espaliers," The Horticulturist, I (June, 1847), pp. 542-545.

[2]Ibid.

[3]J. C. Holmes, "Horticultural Department," The Farmer's Companion and Horticultural Journal, I (May, 1853), pp. 85-87.

[4]Ibid.

[5]"Introduction," The Horticultural Register and Gardener's Monthly, I (Jan., 1835), pp. 7-9.

people who judged the varieties entirely by their novelty rather than their quality. Desiring new American varieties, Hovey tried to get Americans to begin experiments in cross fertilization similar to English and French ones.[1] He said, "It would be indeed strange, that with the energy and zeal characteristic of the American citizen, we should suffer our gardens alone to be stocked with foreign productions."[2]

Although Hovey had some strange ideas himself, as an editor he often took an admirable stand in horticultural matters. One might say that he was newsworthy; he was often admired or criticized by other editors for his views. He was one of the few who did not believe in heading fruit trees back after they were transplanted.[3] Among other interesting things, Hovey reported that the first "efficient" fruit gatherer was on the market in 1835. This gadget consisted of a twenty-foot pole with a net or cloth "hose" which carried the fruit directly from its branch to the basket.[4]

A new method of propagating fruit trees from cuttings was found successful in 1851. This included dipping the ends of the cutting into grafting wax or rosin before placing them in clean sand. It was reported that the cuttings could be rooted on the south side of a building without artificial heat. Nurseries were told to run a sharp chisel

---

[1]"Introduction," Magazine of Horticulture, I (Jan., 1835), p. 4.

[2]Ibid.

[3]C. M. Hovey, "Seasonable Hints on Pruning," Magazine of Horticulture, XX (April, 1854), pp. 181-184.

[4]"The New Fruit Gatherer," The Horticulturist, I (Oct, 1846), pp. 178-180.

under their fruit trees before they grew over two feet high.[1] Each of these three practices resemble in varying degrees ones following today. Cuttings are dipped in a growth-promoting substance; horticulturists are doing extensive propagation outside, with the aid of a constant mist of water; and nurseries recognize the fact that the root pruning produces a more compact root.

Pear

Of the individual tree fruits, the pear dominated the magazines. In 1854, Hovey said that it was more important than the apple in the west.[2] The disease, fireblight, remained a favorite topic. From fifty years of observation and experiments, which included a content analysis of the pear sapwood, Dr. J. O. Kirtland reported that he believed the reason some pears escaped fireblight was that they had been raised from seed and planted on rich virgin soil.[3] Dr. Kirtland's mistrust of the budded or grafted pear resulted from the reported union of unsuitable varieties and stocks. The Michigan Farmer cautioned readers that the variety of the trees "that is worked upon guinea stock" must be carefully selected.[4]

---

[1]"Orcharding," The American Agriculturist, X (March, 1851), pp. 89-90.

[2]"Progress of Horticulture for 1853," Magazine of Horticulture, XX (Jan., 1854), pp. 4-5.

[3]Dr. J. P. Kirtland, "On the Cultivation of the Pear Tree," Magazine of Horticulture, XX (April, 1854), pp. 166-172.

[4]J. C. Holmes, "Pears on Quince Stocks," The Michigan Farmer XIII (Sept., 1855), p. 273.

Although Dr. Kirtland's conclusions were wrong, his statement that he had seen newly planted pears die in a period of eight years from fireblight while some older ones survived it, was accurate and puzzling.[1] The famed Endicott pear tree of Salem, Massachusetts, said to be planted in 1630, continued to bear fruit yearly. In 1851, this tree was described as having a hollow trunk and being dwarfish, only 18 feet high with the circumference of its limbs being 55 feet.[2] As one of the horticulturists suggested, the only answer to fireblight at this time was the knife, the ultimate destruction of the tree.[3]

Peach

Another disease, the yellows, was responsible for a great deal of the interest in the peach at this time. It was said to be contagious and communicated through the seed.[4] In 1846 The Horticulturist stated that the disease was transmitted by pruning. Careful study of parts of diseased plants under a microscope showed no sign of an insect. The Yellows in the peach was another mystery. Observation indicated that proper nourishment seemed to cause the disease to disappear. The best remedy of the day, however, was to "pull up and replant."[5]

---

[1]Kirtland, loc. cit.

[2]"The Endicott Pear Tree," The American Agriculturist, X (April, 1851), p. 120.

[3]J. H. Ernst, "The Fireblight--Cracking of Pears," The Horticulturist, X (Oct., 1855), pp. 457-458.

[4]Robert Sinclair, "The Yellows in the Peach Tree," The New England Farmer and Horticultural Register, XX (July, 1841), pp. 18-19.

[5]L. Wyman, "The Yellows in Peach Trees," The Horticulturist, I (Nov., 1846), pp. 212-214.

Curculio Worm

The curculio worm's damage to the fruit of the plum, the nectarine, and the apricot brought a deluge of original remedies into the magazines. Some of the more drastic ones were paving the ground below the tree,[1] or covering this surface with a thin coat of salt.[2] These were based on a sound fact; when the rotten fruit containing the eggs fell to the ground, the curculio upon hatching would perish. The danger these remedies presented to the trees was not considered. In their day these were plausible; responsible well-known men as Downing recommended them.[3] A milder remedy, frequently employed, was that of fencing pigs and geese under the trees, then shaking the trees, allowing the insects to fall on sheets. The animals would then eat them.[4] William Adair summed all of these remedies up when he stated that they were "as numerous as the quack vendor's cures of consumption or any other incurable disease."[5] In the same article, however, he reported five other remedies, stating that the best one was covering all of the branches with fish oil when the fruit reached the size of a pea.[6]

---

[1]"Hints to the Cultivator of Fruits," The Michigan Farmer, III (April, 1845), pp. 19-20.

[2]John L. Williams, "Plums," ibid., (May, 1845), p. 31.

[3]"Hints to Cultivators of Fruit," ibid., (Dec., 1845), p. 113.

[4]The New Curculio Remedy," The Horticulturist, X (Jan., 1855), p. 48.

[5]William Adair, "Curculio Remedies," ibid., (April, 1855), p. 171.

[6]Ibid., pp. 170-172.

The Grape

Although almost completely interpreted as the grape in magazines from 1810-1835, small fruits were well on their way to their present importance in the following period. Interest in the strawberry reached such heights, that the coverage the magazines gave it approached that awarded the esteemed grape. In a similar, although less striking fashion, magazine space devoted to the bramble fruits increased to cover their complete culture.

Hovey was responsible for much of the new interest in the native grape. By 1855, he had declared that further improvement of the grape would have to be by hybridization instead of cultivation. He advised readers to examine each wild vine they saw, saying that it might be the very one needed in the breeding program.[1] As evidence for his belief, Hovey cited the new varities "Concord" and "Diana."[2] The promised Concord grape was one of two thousand seedling plants grown by Mrs. E. W. Buel. Growing on a poor sandy loam, Hovey stated that it had not been injured by frosts or droughts.[3]

The vine was not pruned or pinched, "nor had it had any application of the horticultural arts, whereby precocity and size are attained"; yet it was a good grower and ripened before frost.[4] Hovey further stated

---

[1]S. Hale, "Can Our Native Grapes Be Improved by Cultivation?" Magazine of Horticulture, XX (Dec., 1854), p. 549.

[2]"The Production of Plants by Hybridization," ibid., (June, 1854) pp. 249-251.

[3]C. M. Hovey, "Description and Engraving of the Concord Grape," ibid., (Feb., 1854), pp. 63-67.

[4]Ibid., p. 66.

that it was a good wine and table grape.[1] Hovey was an enthusiastic supporter of hybrids at his time, and he reminded readers that he had mentioned hybridization as a possible source of new varieties as early as 1838.[2]

Of the old grapes, the "Catawba" was said to compose nine-tenths of the cultivated vineyards in the west and also to be the main grape of the middle states. The Scuppernong grape was in great demand in the South.[3] Hovey said that the variety "Diana" was better for New England than "Isabella."[4]

Stressing the fact that the grape fruits on the young wood of the previous year's growth, Hovey stated that every inch of old wood was worthless.[5] On the basis of this he recommended the spur system of pruning for cold climates, rather than the renewal system. He also stated that the vine should remain horizontal throughout the winter until May, as this slowed the flow of sap, thereby causing the buds to break more slowly and evenly.[6] Hovey considered weeding or disbudding the vine necessary for a good crop and implored that it become a general practice.[7]

---

[1] Ibid., p. 67.

[2] "The Production of Plants by Hybridization," loc. cit.

[3] "Cultivation of the Grape," The Horticulturist, X (Sept., 1855), pp. 417-421.

[4] Hovey, loc. cit.

[5] Hale, loc. cit.

[6] "Note on the Culture of the Grape," The Horticulturist, X (Feb., 1855), pp. 66-68.

[7] Ibid.

The Strawberry

Hovey naturally had a great interest in the strawberry, for the hybrid known as "Hovey's seedling" had been cultivated since 1810. It was considered the best variety. The Boston Pine strawberry, however, was recommended especially for the New York area.[1]

The sexual character of the strawberry was a topic for seemingly unlimited debate. No one knew the answer; however, all of the magazines reported the latest arguments. The argument that raged between Hovey's Gardener's Magazine and The Horticulturist, with the latter maintaining that strawberries in their original or normal state had a natural proportion of stamens and pistils,[2] seldom missed an issue. The editors continued to answer each other's comments throughout the period.

Interest in developing an everbearing strawberry grew. "Stoddard's Red Alpine" was introduced by Mr. J. W. Bissell who thought it was a valuable everbearing kind.[3] In Georgia by planting six rows of "Hovey's Seedling" between each row of "Early Scarlet" growers had had fruit from March to September. The factors thought to be responsible for this were that the plants were never manured or watered. Manure was said to yield only abundant foliage. The writer said that in the autumn a light dressing of top soil from the forest was applied. Over this a covering of leaves was placed and allowed to decay. These leaves also

---

[1]"Notes on Strawberries," Magazine of Horticulture, XX (Aug., 1854), pp. 357-362.

[2]J. W. Bissell, "Stoddard's New Strawberry," The Horticulturist, I (Aug., 1846), pp. 77-78.

[3]Ibid.

served to keep the berries clean. Although the writer was aware that the Georgia climate was responsible for the full six months of production, he suggested that northern growers try these practices.[1]

The Brambles

Among the bramble fruits, the red and black raspberries were given special recognition by the magazines. The everbearing black raspberry, discovered in Ohio in 1832, was said to produce one crop in June, on the previous year's canes and to provide successive fruit until October as the younger canes matured.[2] The "Red Antwerp" seemed to be the most favored variety of red raspberry. The magazines recommended that its canes be woven together at the top, for additional support. Tanbark was said to be a good mulch for the raspberries as well as the other small fruits.[3] Writers reported that the hardy "Lawton blackberry" or native blackberry was not liable to insects.[4] Horizontal training was recommended as a practice that would cause all of the eyes to break and produce a full crop of fruit.[5]

Although the gooseberry, currant and cranberry were given less attention by the magazines, there were articles on the culture of each.

---

[1]"Strawberries--The Secret of Growing This Fruit Six Months Continuously," The American Agriculturist, X (Aug., 1851), p. 253.

[2]Ezra Carpenter, "The Everbearing Raspberry," ibid., I (April, 1842), pp. 5-6.

[3]"Tan Bark for Raspberries," The Ohio Valley Farmer, III (March, 1858), p. 35.

[4]"The Lawton, or New Rochelle Blackberry," Magazine of Horticulture, XX (April, 1854), pp. 174-178.

[5]"Train the Blackberry Horizontally," The Ohio Valley Farmer, III (May, 1858), p. 74.

Among the more interesting practices advised for the gooseberry was the pruning operation. Hovey recommended that all of the shoots except the two-year-old ones should be removed at the base of the plant. He criticized the practice of cutting the remaining shoots back, forming a round head, saying that by causing secondary shoots to develop thickly, less air circulated among them. The result of this, he said, was small fruit and mildew.[1] The Horticulturist stated that a three-inch mulch of salt hay around the plants during the summer would prevent mildew, although they did not know why![2] The advice to never plant gooseberries in the shade of trees[3] makes one wonder if any connection between the gooseberry and the white pine blister rust was recognized at that time.

Most writers of the day were convinced that of the three varieties of cranberries only the "Bell" would grow on dry or upland soil. Poor soil was recommended for the bogs as writers were convinced that the plants' sources of nourishment were the air and the water.[4]

Magazines from 1835-1860 gave the complete culture of each type of fruit from the propagation to the fruit gathering. Previous to this date it was pointed out that the magazines discussed even the most important fruit in terms of its uses more frequently than its cultivation.

---

[1]S. Walker, "On the Cultivation of the Gooseberry," Magazine of Horticulture, I (June, 1835), pp. 207-209.

[2]"A Preventive to the Mildew in the Gooseberry," The Horticulturist, I (July, 1846), pp. 25-26.

[3]Walker, loc. cit.

[4]"The Cranberry," The Farmers Companion and Horticultural Journal, I (March, 1853), pp. 51-52.

The Hedge

A basic change in the type of information was noted also in the articles on the hedge. Before 1835, writers reported almost entirely on which plant was most suitable for hedges. Although this remained a topic of interest, after 1835 there were innumerable accounts telling just how to grow the hedge. The Michigan Farmer, in an article entitled "Fencing" said that a trench ten feet wide should be prepared, mixing manure in with the soil. It stated that the taproots of the seedlings should be cut back to eight inches or given lateral direction. This, by causing lateral root development, was to keep the root system shallow and well aerated. The plants were to be planted over the entire width five inches apart. The spring following fall planting, the magazines recommended that the seedlings be cut back to a height of four inches and the resulting shoots interwoven. Each successive spring they would be left a little taller. By the fourth year, the plants were reported to be between two and three feet tall, after having been held back. The Michigan Farmer also advocated additional manure each year.[1]

This was typical of the many recommendations made for planting and training the hedge. In Michigan, the two native thorns were said to be superior to the hawthorn or crabapple for hedge plants.[2] In the continuing argument about which plants were best for hedges it was pointed out that the White Hawthorn had proved good for thirty years, and although it was subject to blight and disease, so were the rest of the

---

[1]Petra, "Fencing," The Michigan Farmer, III (Jan., 1846), pp. 145-146.

[2]Ibid.

thorns. This writer said that the buckthorn, Rhamnus catharica, which some maintained was the best plant for hedges, had no merit.[1]

The osage orange, Maclura aurantiaca, a native of the Arkansas territory, was said to be the best hedge for fencing animals.[2] It was also recommended to hold the banks by railway lines. In the southern states, the wood was reported to be preferable to the live oak for shipbuilding, to be prized for cabinet work and to be used for making a yellow dye.[3] The planting method was simpler than the previously mentioned method as the type of growth necessitated only a double row of plants in a three-foot-wide trench. A mulch of manure, although straw, wood chips or sawdust could be used, was recommended to keep the ground moist and too add to the fertility of the soil.[4]

Besides their use as live fences, hedges were highly thought of as ornamentals to be used in front of a home.[5] For this use the English hawthorn, Crataegus oxycantha, and the Italian privet were rivals.[6] The use of native plants was encouraged, however, by The Horticulturist.[7] William Prince, a well-known nurseryman, stressed the value of evergreen

---

[1]"Best Plants for Hedges," The Horticulturist, X (Feb., 1855), p. 95.

[2]"Hedges," The Farmer's Companion and Horticultural Journal, I (Jan., 1853), p. 11.

[3]"Trees, Etc., for the Banks of Railroads," The Horticulturist, X (Dec., 1855), p. 573.

[4]"Hedges," loc. cit.

[5]Ibid.

[6]William R. Prince, "Remarks on Hedges," The Horticulturist, I (Sept., 1846), pp. 127-129.

[7]A. Saul. "The American Arbor Vitae for Screens and Hedges," ibid., (July, 1946), pp. 23-24.

hedges. For this purpose, he recommended the American Arbor Vitae [sic], the juniper, the red cedar, and the northern spruce.[1] The most prized of the evergreens for hedges were the pyracantha[2] and the hemlock.[3] For rapid growth, Prince recommended a hedge of flowering shrubs such as Syringa, Lilac, and Snowball.[4] A. J. Downing added Cydonia Japonica, the Japanese quince, to this list.[5]

Summary

In the period from 1835 to 1860, magazines stressed the ornamental function of the plants mentioned in the earlier period. This burst of information in the magazines in 1835 could easily leave a false impression. America did not become beauty-conscious overnight; however, certain men became increasingly aware of the need for an appreciation of nature and a knowledge of the influence of various factors upon it. Among these men were the editors of the two horticultural magazines, Charles M. Hovey, Thomas G. Fessenden and J. E. Teschemacher. They realized that horticultural information could not flourish as long as it had to compete with agricultural news for space in agricultural periodicals.

---

[1]Prince, loc. cit.

[2]"Evergreen Hedges," The Horticultural Register and Gardener's Monthly, I (March, 1835), pp. 140-142.

[3]"Hedges," The Horticulturist, I (Sept. 1846), p. 147.

[4]Prince, loc. cit.

[5]"Hedges," loc. cit.

Thus, the broadening of interests in 1835 took place. As subject matter, fruits remained important. Small fruits came into prominence with interest in the strawberry threatening the position of the grape. In the group of larger fruits, the pear tree attained top rank in the magazines. "The Hedge" took on new features, while the osage orange dominated as a fence for cattle. Many different plants were recommended as suitable for ornamental hedges. Among the most obvious changes in the character of horticultural information was the emphasis placed on plants that performed no function, other than adding pleasure and beauty to life. Horticulture, which was first "resorted to" in America as a means of sustenance, by 1860 definitely had become a means of pleasure. The subsequent years have seen the art of horticulture develop further in terms of both personal pleasure and profitable endeavor.

INFORMATION CONCERNING ORNAMENTAL PLANTS FROM 1860-1910

In 1864 Hovey said that the state of the public mind during this "great struggle," rather than any real loss of interest in horticultural pursuits, caused the rather stagnant position of horticulture at that time.[1] He said of the war, however, "the trials through which we are passing will end in the one grand object of Americanizing America. It will teach us as a nation to be independent in everything."[2] Hovey further stated that art, science, and literature would no longer be reflections of European ideas. America had been forced to be on her own; high duties had prevented importation of plants and this country had found it could produce its own plants. Hovey encouraged all horticultural societies to create a taste for American-produced plants and thus end the desire for European novelties.[3]

Improving the Home Grounds

One of the widely discussed topics in the latter part of the 19th Century was landscaping. "Decorative gardening," as the use of ornamental plants was termed in Garden and Forest, was in its infancy. Many writers expressed the opinion that few knew how to use plants together pleasingly.[4]

---

[1]"Horticultural Literature," Magazine of Horticulture, XXX (Jan., 1864), pp. 13-14.

[2]"The Progress of Horticulture," ibid., p. 1.

[3]Ibid., pp. 1-2.

[4]"The Future of American Gardening," Garden and Forest, I (March 7, 1888), pp. 13-14.

It was suggested to rural home owners that they "have certain sympathy with nature and the poetry of the farm."[1] Authors stressed the feeling that the lawn should not be dotted with "new-fangled trees, or crowded with vases and statuary or arbors, rustic seats and rock-work, or thrown into jolting terraces or cut up into flower beds in arabesque patterns."[2] Instead the lawn should be only as big as could be easily kept, with a few fine trees and a wavy belt of shrubs.[3] The lawn and its planting should be an expression of respose, unity, and breadth.[4]

People seemed to have been taking a great interest in plantings around their homes.[5] The debatable point was exactly how to use the plants. In 1865 the latest fashion was the use of plants in mass rather than as individuals. "Bedding out and ribbon planting" were popular.[6] The bedding out system was deplored by many who accused it of requiring limited skill of the gardener especially since the number of plants suitable for this purpose was limited.[7] Others maintained that the beds were pleasing if well designed and neatly cared for;

---

[1]"A Plan for Rural Grounds," The American Horticulturist, I (Oct., 1885), p. 28.

[2]A. D. G., "Hints to Ornamental Planters," The Horticulturist, XX (July, 1865), p. 200.

[3]Ibid.

[4]John Arthur Hayes, "Garden Architecture, and Hints on Landscape Gardening," American Journal of Horticulture, I (April, 1867), pp. 207-212.

[5]The Progress of Thirty Years," Magazine of Horticulture, XXX (Dec., 1864), pp. 417-425.

[6]Edward S. Rand, Jr., "Flowers in Masses," The Horticulturist, XX (June, 1865), pp. 164-168.

[7]"Horticultural Fashions," Garden and Forest, I (March 28, 1888), p. 49.

however, all of the writers advised more belts and borders of mixed flowers with backgrounds of trees and shrubs.[1] Ivy and periwinkle were recommended as good plants to edge borders.[2]

Saying that all grounds would suffer if any particular section of plants was thrown out, an article stated that each gardener should design a decorative feature to suit his own case.[3] The movement toward imitating nature's irregular planting was further strengthened in a plea to do away with the odd circular rockery in the front yard.[4] Garden and Forest summed up the influence of nature at this time by saying, "The basis of good gardening is the love of nature."[5]

The rapid concentration of the population in cities in the nineties led to advice on city gardens.[6] Here again the common fault was that too much was put in a small space. On small lots the use of smaller trees and shrubs was recommended so that the house would not seem buried. If the yard were already crowded articles advised that plants be cut out to give the place a neat appearance.[7] The American Horticulturist reminded readers that city dwellings themselves were more beautiful

---

[1]"Flower Garden and Pleasure Grounds," The Gardener's Monthly, XXI (April, 1879), pp. 97-98.

[2]Ibid., (May, 1879), pp. 129-130.

[3]"Flower Gardening," Vick's Monthly Magazine, X (Dec., 1887), pp. 366-367.

[4]Warren H. Manning, "Front Yards," ibid., (June, 1887), pp. 170-172.

[5]"The Future of American Gardening," Garden and Forest, I (March 7, 1888), pp. 13-14.

[6]"Gardening Leads," American Gardening, XV (Oct. 27, 1894), p. 438.

[7]Manning, loc. cit.

than country homes so those living in the city should not hide their homes with vines and trees.[1] One writer reported that to garden on a small scale one needed a "lively imagination assisted by good taste.[2]

The Culture of Trees

Readers were encouraged to increase their use of trees, especially native ones, during this period. "A commendable pride and love for one's country demands that we show the same regard for our native trees that the Englishman does for his oak."[3] A later writer implored that local conditions and indigenous plants be considered when plant material was being selected.[4] Articles stressing the importance of buying trees and all plants at reliable nurseries reflected the fraudulent practice of many during this time.[5]

The best method for moving a tree was to dig a trench around the tree in the fall and to allow the ball of earth to freeze before moving it. In 1864 as well as in 1900, it was reported best to prune the roots and the top of trees when moving them.[6] The soil should have been prepared by plowing to a depth of eight inches and then digging a hole

---

[1]A. H. Crozier, "Trees for the City," The American Horticulturist, I (May, 1885), pp. 319-320.

[2]James Satterlee, "Gardening on a Village or City Lot," The American Horticulturist, I (March, 1885), p. 215.

[3]Lora S. LaMince, "Ornamental Trees," Vick's Monthly Magazine, XX (Nov., 1894), p. 10.

[4]Thomas H. McBride, "Neglected Native Trees and Shrubs," Gardening, X (Sept. 15, 1901), pp. 10-12.

[5]B. W. Steere, "Methods of Buying and Selling Trees and Plants," The American Horticulturist, I (March, 1885), p. 232.

[6]"Planting Trees," The American Journal of Horticulture, II (Nov. 1867), pp. 263-266.

with a diameter and depth of three feet. It was recommended that the trees be planted at the same depth as they had been in the nursery.[1] The necessity of packing the earth tightly about the newly planted tree was re-emphasized.[2]

After planting, watering should be done with care in order not to "consolidate" the soil. If necessary the tree should be staked; however, this was considered a radical practice. Mulching was thought unbeneficial to large trees with deep roots and dangerous due to insect, mice and disease. Instead of a mulch, large trees should have open soil, which was cultivated each fall to expose insect forms to the frost.[3] To avoid starvation of a tree, readers were advised to put two to three inches of old manure or loam around the base of the tree. In extreme cases it was pointed out that it might be necessary to dig the tree up, "properly fit the soil again," and replant.[4] To rejuvenate old trees, this treatment of the soil as well as additional pruning of the tree to expose more leaf surface to the light were advocated.[5] Readers were reminded however that pruning at any time was "a blow struck at the vitality of the plant."[6] Winter was said to be the best season to

---

[1]"Plant Trees and Care for Them," American Gardening, XXIV (Jan. 24, 1903), p. 57.

[2]"Flower Garden and Pleasure Ground," The Gardener's Monthly, XXI (March, 1879), pp. 65-66.

[3]Eugene H. Baumann, "On Planting Trees and Storing," The American Journal of Horticulture, II (July, 1867), pp. 1-5.

[4]"Starvation of Trees," Popular Gardening, I (Nov. 1885), p. 18.

[5]"The Rejuvenescence of Old Trees," Garden and Forest, I (Sept. 19, 1888), p. 349.

[6]"Flower Garden and Pleasure Ground," loc. cit., (Dec., 1879), p. 357.

prune large branches although the tree might be shaped a little more in May and June. The wounds should be covered with ordinary paint.[1] Some writers, referring particularly to the "beheaded" street and park trees, called pruning a lost art left to the ignorance of "tree butchers."[2]

Types and Uses of Trees

The importance in selecting healthy, thrifty-growing trees of good habit and outline was pointed out. The ornamental trees considered to meet these specifications most aptly were the American elm, the oak, the beech, the maple and the birch.[3] The sugar maple was recommended as a good shade tree for the street. For a shade tree in the yard, the Norway maple was considered best because more light could pass through its foliage than that of the sugar maple. These maples were described as trees which were "beautiful, unbrageous, symmetrical, healthy and useful."[4] In a large yard it was suggested that two or three trees might be planted in a clump.[5] Other good shade trees were the red oak, the gingko and Liquidambar.[6]

---

[1]"Proper Time for Pruning Trees," Meehan's Monthly, X (Dec., 1900), p. 183.

[2]"Pruning," ibid., (Nov., 1900), p. 170.

[3]Lora S. LaMince, loc. cit.

[4]"Shade Trees About the Dwelling," American Gardening, XV (Feb., 1885), p. 34.

[5]"Flower Garden and Pleasure Ground," loc. cit., II (Aug., 1869), pp. 226-227.

[6]S. B. Parsons, "Best Shade Trees for Streets," Gardening, I (Jan. 1, 1893), p. 122.

Street trees were a cause of great concern. Garden and Forest called the planting and care of street and roadside trees the most neglected branch of rural economy in America. The editors attributed this to choosing the wrong kind of forest-grown trees instead of nursery ones, planting too close, and pruning improperly.[1] In Chicago the American elm was said to be the most popular street tree, although the cottonwood, the American linden, the ashes, catalpa and ailanthus were also recommended.[2] Authors pointed out that the only proper time to use a row of the same kind of trees of uniform size was when "lining a street."[3] When doing this, the reader was cautioned that tree guards might be necessary to protect the trees which were so often used as hitching posts. A better practice mentioned, however, was to have hitching posts for the horses so that trees would not be abused.[4]

The use of trees as windbreaks, to protect less hardy trees, remained popular. Common ones used included the Norway spruce or maple, and hemlock spruce, and the Scotch, Austrian and white pines.[5] In 1888 L. H. Bailey stated five rules for these shelter belts; among these he included planting the trees six rods from any fruit trees and planting them so that they would not interfere with air drainage. He stated that native deciduous trees were best since dense-foliaged trees would

---

[1]"Street Trees," Garden and Forest, I (April 11, 1888), p. 74.

[2]"Street Trees," Meehan's Monthly, I (Feb. 1892), p. 25.

[3]Crozier, loc. cit.

[4]"Trees for City Streets," American Gardening, XXIV (July 25, 1903), pp. 369-370.

[5]"Flower Garden and Pleasure Grounds," loc. cit. XXI (Nov., 1879), pp. 321-322.

likely force "buds of the tenderer plants before the danger of frost was past."[1] Although hardiness remained a problem, it was reported that some trees, including Rhus cotinus and Cornus florida, which were approximately half-killed back each year, seemed to be becoming acclimated gradually.[2] Evergreen trees, especially the fir, the pine and the Norway spruce, were said to be made more hardy by cutting out the lead shoot and training a side shoot up, thereby "forcing vital power into the lower branches."[3] Writers agreed that many trees which seemed not to be hardy were either summer starved, overcrowded, or exposed to too much wind.[4] One of such trees admired during this time was the Cedar of Lebanon, which was said to need plenty of food and water as well as a well-drained soil to be hardy and healthy.[5]

American interest in evergreen and coniferous trees lagged far behind that in Great Britain; however, the desire for evergreens increased greatly in America after the sixties. Hovey reported in 1864 that ornamental tree planting was still limited as people remained too conscious of the "utilitarian spirit."[6]

Among the smaller ornamental trees frequently mentioned as early as 1860 were various magnolias, including Magnolia glauca and

---

[1]L. H. Bailey, "Rules for Planting Windbreaks," Garden and Forest, I (March 21, 1888), p. 46.

[2]"Some Trees and Shrubs of Extreme Hardiness," Meehan's Monthly, X (March, 1900), pp. 38-40.

[3]"The Beauty of Evergreen Trees," ibid., I (Nov., 1891), p. 71.

[4]Ibid.

[5]"Cedar of Lebanon," ibid., (Sept. 1891), pp. 38-39.

[6]"Arboriculture Progress," Magazine of Horticulture, XXX (Jan. 1864), pp. 12-13.

Magnolia acuminata.[1] Pyramidal pear trees, trained into a pentagon, were admired and encouraged, provided one had the time and skill to keep them properly.[2] The use of the novelty drooping trees was discouraged although some writers admitted an occasional one, as the cut-leaf weeping birch, would be all right.[3] Other fashions of the day included training wistaria as a standard.[4] The Japanese apple, Pyrus floribunda or Pyrus malus was admired and was said to be the best adapted of all foreign trees.[5] The Transcendent variety of crab apple was named as the best one for ornament and fruit, while the double flowering crab apples were popular for their flowers.[6]

The native forest tree was of far more concern at this time than these small trees. Authors begged that readers use the native tree wisely and judiciously. Liriodendron tulipifera was one of the most admired as well as apparently neglected trees.[7] Readers were advised to select plants such as this which were attractive in all seasons.[8]

---

[1]Dr. Jared P. Kirtland, "The Magnoliacea," The American Journal of Horticulture," I (March, 1867), pp. 174-176.

[2]"Pyramidal Pear Trees," Magazine of Horticulture, XXX (Sept., 1864), pp. 332-335.

[3]"Lawn and Lawn Trees," Vick's Monthly Magazine, I (March, 1878), pp. 70-71.

[4]"The Wistaria as a Standard," ibid., XX (April, 1897), p. 83.

[5]C. S. S., "The Japanese Apple," Garden and Forest, I (May 23, 1888), p. 152.

[6]"The Crab Apples," Popular Gardening, I (Nov., 1885), p. 13.

[7]"Now for Tree Planting: Arbor Day," Vick's Monthly Magazine, XX (April, 1897), pp. 85-86.

[8]"Ornamental Planting," Magazine of Horticulture, XXX (Dec., 1864), pp. 425-432.

Shrubs

Although shrubs were not given the same attention as trees during this period, they were most important. As one writer aptly expressed it: "If we are ever to have in America a distinctive school of gardening, it must be based upon a comprehensive use of hardy deciduous shrubs."[1] Professor Beal said that it was especially important to use shrubs in the small yard. He said that they should be massed, rather than scattered about the yard, so that they might be "enriched and cultivated" together.[2] In grouping the shrubs it was recommended that the entire area be spaded and the plants set thickly, only eighteen to twenty-four inches apart, so that there would be "no danger of a display of bare earth." The plants could later be thinned.[3] This fear of exposing the bare earth was reinforced by the encouragement to plant ground covers under large shrubs.[4] Shrubs were said to be easily grown, demanding only loose friable soil free of weeds, and enough room to spread.[5]

Pruning was the cultural practice given most attention during this period. Writers abhored the method of shearing all of the shrubs at uniform height, thereby destroying the beauty and grace of the plant.[6]

---

[1]"Hardy Shrubs," Garden and Forest, I (March 28, 1888), pp. 50-51.

[2]Professor Beal, "Around the House," The American Horticulturist, I (Oct., 1885), p. 42.

[3]"The Planting of Shrubberies," Garden and Forest, X (Jan. 6, 1897), p. 2.

[4]Ibid., pp. 1-2.

[5]Edgar Sanders, "What Shrubbery Wants," The American Garden, XV (March, 1885), p. 56.

[6]S. A., "Pruning Shrubs," Garden and Forest, I (April 11, 1888), p. 80.

Admiring "nature's pruning," an author said that wild shrubs had rare charm free from the "fussy gardeners' trimming."[1] General rules for the time of pruning stated that shrubs which bloomed in the spring and early summer should be pruned after blooming and that late blooming shrubs could be pruned either in the fall or early spring.[2]

Of the deciduous flowering shrubs greatly admired in the 1860's, Hydrangea hortensis gained additional interest due to the change in flower color. Iron filings and blacksmith-forge filings mixed into the earth were guaranteed to change the flower from pink to blue, while the addition of chalk water was said to reverse the color. Although the hydrangea was said to "suit any situation," a top-dressing of rich pond mud was advised in May. Many writers continued to recommend that the plant be brought indoors for the winter.[3] The winter damage to lilacs in the far north was partially blamed on the privet stock upon which the lilac was generally grafted. It was thought that a heavy mulch put on after the ground was well frozen would have prevented this.[4] Other small shrubs of great beauty that were recommended were Syringa grandiflora, Weigelia rosea and the upright honeysuckle.[5] Joseph Meehan said that most of these flowering shrubs would root easily

---

[1]"Pruning Shrubs," The American Garden, XV (March, 1885), p. 61.

[2]S. A., "Pruning Shrubs," Garden and Forest, I (April 11, 1888), p. 80.

[3]Charles McDonald, "Hydrangea hortensis for Outdoor Decoration," The American Journal of Horticulture, I (Jan., 1861), pp. 61-62.

[4]John Craig, "Lilac on Privet Stock," Garden and Forest, X (May 26, 1891), p. 208.

[5]"Trees and Shrubs of Beauty for a Place of Small Extent," The Horticulturist, XX (Feb., 1865), pp. 35-37.

from hardwood cuttings nine to twelve inches long if placed in the cellar where they would be allowed to callus before planting outside in the spring.[1]

The deciduous and evergreen rhododendrons or azaleas, particularly the native ones, were by far the most admired shrubs.[2] Varieties of Rhododendron maximum were said to flourish with little care; however, readers were cautioned that only those produced by native seedlings were hardy.[3] A heavy permanent six to eight inch mulch was thought necessary for rhododendrons; this was to be turned under each fall and renewed. The proper soil for rhododendrons was said to consist of one-third peat, one-third sand, and one-third well-rotted sod and manure. Lime was considered "most repulsive" to them.[4] It was reported that if the soil were open and well-drained, rhododendrons would even grow in full sun.[5] The Indian Azalea was said to grow well planted in a mixture of peat and sand if the leader were topped each time it grew four inches. This azalea was not considered hardy but might be taken inside in the winter.[6] The chief problem confronting growers of the Chinese azaelea was the black thrip which was controlled by four successive fumigations

---

[1]Joseph Meehan, "Propagating Shrubs from Cuttings," Gardening, I (April 1, 1893), p. 223.

[2]"Arboriculture Progress," Magazine of Horticulture, XXX (Jan., 1864), pp. 12-13.

[3]"Rhododendron maximum and its Varieties," ibid., (June, 1864) pp. 213-214.

[4]H. W. S., "Broadleaved Evergreens," The Horticulturist, XX (Jan. 1865), pp. 16-17.

[5]T. B. M., "Rhododendron Culture," Meehan's Monthly, I (July, 1891), pp. 3-4.

[6]"The Indian Azalea," Magazine of Horticulture, XXX (May, 1864), pp. 179-183.

of burning tobacco paper and rags three days apart.[1]

Readers were encouraged to grow some evergreen shrubs in spite of the feeling that doing so was merely copying English gardens. One writer stressed that the best gardens had the native and exotic plants growing side by side.[2] It was advised that broad leaf evergreens be planted shallow and in a situation where they would have partial shade in the winter.[3] The end of August was said to be a good time for transplanting evergreens. If the soil were dry it was recommended that the plant be soaked thoroughly and a basin be left around it to hold the water.[4] Evergreens, especially the Scotch and Austrian pine, were thought to benefit from frequent transplanting.[5]

In 1885 it was reported that pruning evergreens had recently become a general practice. The lead shoot of all evergreens including pines had to be cut out. In transplanting, the evergreens were supposed to be cut half back.[6] As early as 1879, a few winter gardens of evergreens were found; they were discouraged, however, unless interplanted with Coleus or Achyranthus to make the garden attractive in the summer.[7]

---

[1]"The Chinese Azalea," Magazine of Horticulture, XXX (June, 1864), p. 214.

[2]L, "Evergreens," The American Journal of Horticulture, II (July, 1867), pp. 20-23.

[3]"Flower Garden and Pleasure Grounds," The Gardener's Monthly, XXI (April, 1879), pp. 97-98.

[4]Ibid., II (Aug., 1869), pp. 226-227.

[5]J. F. M., "Transplanting Evergreens," Meehan's Monthly, I (Dec., 1891), p. 87.

[6]"Pruning Evergreens," The American Garden, XV (Aug., 1885), p. 196.

[7]"Flower Garden and Pleasure Ground," loc. cit., (Oct. 1879), pp. 289-290.

Evergreens gained increasing admiration in America as ornamental plants, specimen plants, and ornamental hedges.[1]

An evergreen hedge was considered to give a taste of richness to the home grounds. Readers were advised to choose between the Arborvitae, the hemlock, the spruce and the Norway fir according to their own taste and soil.[2] Other plants considered to be good ornamental hedges were the white berried privet, the English box, the American juniper, berbery [sic] and such flowering shrubs as Weigelia, Snowball and the Japanese quince.[3] The white pine was thought to make a most ornamental as well as protective hedge. By 1867 the live fence of the earlier years had lost some of its popularity, for wood and stone were found more economical in many localities.[4] In 1897, authors hesitated to recommend hedges stating that existing ones were overgrown and full of gaps at the bases due to neglect.[5] American Gardening explained the failure of Americans to establish beautiful English hedgerows by saying America was still too young a country.[6]

---

[1]J. F. M., loc. cit.

[2]"Evergreen Hedges," The Horticulturist, XX (Dec., 1865), pp. 390-391.

[3]B. Gott, "Around the House," The American Horticulturist, I (April, 1885), p. 288.

[4]J. F. C. Hyde, "Hedges," The American Journal of Horticulture, II (Oct., 1867), pp. 213-215.

[5]"Some Truths About Hedges, " Vick's Monthly Magazine, XX (July, 1897), p. 130.

[6]"Our Absence of the Hedgerow," The American Garden, XV (Dec. 22, 1894), p. 505.

Vines

During this period the native climbers stepped into prominence as both useful and ornamental plants. The more frequently mentioned in 1864 were the grape, rose, Virginia creeper, bittersweet, clematis, Akebia, Wistaria and honeysuckle.[1] In one season annual climbers such as morning glories, nasturtiums and moonflowers were said to grow ten to twenty feet high in common garden loam with a little manure.[2] Clematis gained great admiration; it was pointed out that its wood was very brittle and should not hang loose. Clematis was known as a rapid grower and the newer varieties were said to be more hardy than the old.[3] A writer advised readers that they might grow clematis in a variety of colors and "have the satisfaction of knowing theirs was not purple like every one elses."[4] A circular bed, ten feet in diameter, made by pegging clematis or other vines down was considered most attractive.[5]

In 1886 Bailey reported that the prairie rose or honeysuckle should be grown on a rack or trellis, and the Japanese ivy on the side of the house.[6] The small rootlets of the ivy were said to remove water from

---

[1]Edward S. Rand, "Our Native Climbers," The Horticulturist, XX (Sept., 1865), p. 283.

[2]"Annual Climbers," Vick's Monthly Magazine, I (July, 1878), pp. 195-198.

[3]P. B. Mead, "The Clematis," The American Garden, VI (Aug., 1885), pp. 192-193.

[4]"Clematises of Other Colors than Purple," Popular Gardening, I (Mar., 1885), p. 66.

[5]Mead, loc. cit.

[6]L. H. Bailey, "Climbers and Their Uses," The American Horticulturist, I (Jan., 1886), pp. 162-163.

walls of houses, thereby keeping dampness out of the house.[1] Vicks encouraged the use of American ivy as a substitute for English ivy.[2] In 1903 the American Garden magazine maintained that the best argument for planting a vine was to visit a home with a well-established one.[3]

Roses

The rose was a popular topic in magazines from 1860 until 1910. A well aerated location receiving a minimum of six hours of sun from April to November was recommended. Circular or square beds were preferred to star or fancy shapes. These beds were to be dug to a depth of two feet.[4] A "somewhat heavy garden loam which was rich, strong and abundantly manured" was recommended as a soil.[5] The addition of sharp sand, leaf mould [sic] or burnt clay to a soil that was too heavy was recommended; for a soil that was too light rotted manure or turfy loam was recommended.[6] To guarantee free soil drainage the Horticulturist suggested that a barrel might be sunk in the middle of the bed with tiles draining toward it.[7] Although a point of much discussion, the

---

[1]Ernest Walker, "Ivy on Walls," Meehan's Monthly, I (Jan., 1892), p. 7.

[2]"Climbing Plants," Vick's Monthly Magazine, I (June, 1878), pp. 164-168.

[3]"Vines and Creepers Give Easy Effects," The American Garden, XXIV (Oct. 3, 1903), p. 521.

[4]John N. May, "How to Prepare a Bed for Roses," Garden and Forest, I (May 23, 1888) pp. 149-150.

[5]Francis Parkman, "Culture of The Rose," The Horticulturist, XX (May, 1865), pp. 140-142.

[6]Angus W. McIntosh, "Cultivation of the Rose, The Gardener's Monthly, XXI (Feb., 1879), pp. 35-36.

[7]Parkman, loc. cit.

magazines seemed to agree that roses on their own roots, with the exception of the Hybrid Tea which should be grafted on manetti stock, grew best in America.[1] Hovey recommended that the Americans should study the likes and dislikes of roses and treat them accordingly. He pointed out that the English and the French did this, and their roses succeed in spite of adverse climatic conditions.[2] Vicks further stated that as fine as the new varieties were, any rose had to be given special culture to form fine flowers.[3] The following three objectives were given for pruning roses: invigoration of the plant, improvement of the flowers, and shaping the plant. The amount of pruning recommended depended upon the individual's purpose; the rule, "roses should be pruned in inverse proportion to the vigor of their growth," was known as early as 1865.[4] The amount of pruning also depended upon the type of rose; pruning instructions were given for the polyantha, Rugosa, Moss, Cabbage, Damask, Gallica, Hybrid Chinese, Penzance Brier, Austrian Brier, Scotch Brier, Climbing Tea and Noisette.[5]

In 1887 Vicks reported that Hybrid Perpetuals and Hybrid Teas were the "present rage" in roses.[6] In 1900 the five best hardy roses,

---

[1]T. D. Hatfield, "Grafted Stock for Roses," Garden and Forest, X (Oct. 24, 1897), p. 425.

[2]"Roses," Magazine of Horticulture, XXX (Feb., 1864), pp. 67-71.

[3]"Floral Gossip," Vick's Monthly Magazine, X (June, 1887), pp. 184-185.

[4]Parkman, loc. cit.

[5]"Pruning Roses," Meehan's Monthly, X (Feb., 1900), pp. 26-27.

[6]"Floral Gossip," loc. cit.

excluding the Hybrid Perpetuals, were said to be "Crimson Rambler," "Harrison's Yellow," Rosa rugosa, Rosa wichuraiana, and Rosa setigura.[1] The Polyantha rose was expected to become prevalent in the north; especially the dwarf ones which were said to be exceptionally hardy and easily protected.[2] Garden and Forest asked that roses be massed rather than "dotted in and out," regardless of variety.[3]

Flowering Plants

Garden and Forest protested that the opinion that a garden existed for its plants, rather than for its delightful view, represented a marked decline in garden art. This magazine further maintained that the value of a plant was determined by its use rather than its rarity. The editors deplored those who felt plants undesirable simply because they were considered common.[4]

In the early part of this period gladioli and lilies, especially the new ones from Japan, were popular.[5] It was reported that it was not necessary to start the corms indoors; they could be planted outside, three to four inches deep in light soil anytime after corn planting season until June first. Planting a clump of six together was said to

---

[1]"The Five Best Hardy Roses," Meehan's Monthly, X (March, 1900), pp. 42-43.

[2]"Polyantha Roses in Beds," Vick's Monthly Magazine, XX (March, 1897), p. 65.

[3]"Rosa setigera," Garden and Forest, X (Aug. 18, 1897), pp. 320-321.

[4]"Common Plants," ibid., (June 2, 1897), p. 211.

[5]"Floriculture Progress," Magazine of Horticulture, XXX (Jan., 1864), pp. 9-12.

be most attractive.[1] The frequent failures with lilies were attributed to overestimating their hardiness as well as planting them in too wet a location. To protect the bulbs from the alternate freezing and thawing which was thought instrumental in the disintegration of the bulbs, a six inch mulch of salt hay was recommended.[2] There were many accounts of various species of lilies, botanical descriptions of the bulb, and articles concerning the dangers of ordering the bulbs from Holland.[3]

By 1885, the chrysanthemum, once considered common, had become a fad; The American Garden reported that a few years ago nurseries could not have sold one-tenth the number demanded in that year.[4] In 1883 over fifty varieties were imported from Japan.[5] Known as a "gross feeder," the chrysanthemum was said to thrive in city smoke and dust if planted in rich soil.[6] The culture of the chrysanthemum as an outdoor plant consisted of planting in the spring, pinching the end of July, pinching the crown bud in August, thereby forcing the plants to bloom before frost.[7] If the chrysanthemums were planted among the shrubbery or next to a wall or fence, a few old leaves were said to protect the

---

[1]Eben E. Rexford, "The Gladiolus," The American Garden, VI (May, 1885), p. 114.

[2]C. L. Allen, "Lilies and Their Culture," The American Horticulturist, I (Nov., 1885), pp. 58-59.

[3]"The Lilies," Vick's Monthly Magazine, I (Oct., 1878), pp. 291-294.

[4]"The Mixed Border," The American Garden, VI (Feb., 1885), p. 26.

[5]"Chrysanthemums," Garden and Forest, I (Nov. 14, 1888), p. 445.

[6]Fred, "The Popular Chrysanthemum," Vick's Monthly Magazine, X (Jan., 1887), pp. 10-11.

[7]John N. May, "Outdoor Chrysanthemums," Gardening, X (Mar. 1, 1902), p. 188.

plants through the winter.[1]

Among other perenials given special interest during this period were hollyhocks, paeonies, pansies and carnations. Vicks said that although the hollyhock was classed as a biennial, it often lived four to five years. The editor stated that if the lower half of the hollyhock buds were removed, the plants would retain their vigor.[2] The paeony was said to thrive in any "sweet porous garden soil that contained manure."[3] The herbaceous paeony was said to be more easily grown than the Tree Paeony.[4] It was reported that the pansy, a long time favorite, would flower longer if planted in a raised bed surrounded by boards. This was supposed to combat the summer heat and dryness.[5] A summer mulch was also recommended for this purpose.[6] The carnation was a very popular garden flower in England at this time; however, Americans were slow to realize that carnations were hardy outside the greenhouse. Bailey, in 1894, reported that the border carnation grew well in Ithaca, New York, in spite of severe winter conditions and hot dry summers.[7]

---

[1]"Hardy Chrysanthemums," Meehan's Monthly, I (July, 1891), p. 8.

[2]"The Hollyhock," Vick's Monthly Magazine, X (March, 1887), p. 86.

[3]"Paeonies," Magazine of Horticulture, XXX (Aug., 1864), p. 304.

[4]Ibid., pp. 301-306.

[5]"How to Raise Fine Pansies," Popular Gardening, I (Aug., 1886), p. 122.

[6]E. S. Rand, "Pansies," American Journal of Horticulture, II (Nov., 1867), pp. 267-271.

[7]L. H. Bailey, "Hardy Carnation," The American Garden, XV (May 26, 1894), p. 277.

In the 1890's Iris kaempfiri, was very popular. It was said to grow best in swampy areas, since it required a lot of water during the growing season. If possible a special bed with a cement bottom and wooden sides, filled with rich compost up to within two inches of the top was recommended. This could be easily watered and mulched.[1]

Of the spring flowering bulbs, the tulip seemed to be favored over the hyacinth in 1885. Because of their low cost and ease of culture Popular Gardening encouraged its readers to grow tulips.[2] Daffodils were said to "dislike" manure, preferring a sandy loam and a sprinkling of ground bone.[3] Half-rotted leaves were considered a good mulch, for the bulb could grow up through them.[4] Spring bulbs were also featured as plants for shady locations and city gardens as the latter were considered usually shady.[5] In these areas the ground covers, Vinca minor and Hedera helix were also suggested.[6] Ferns, lilies-of-the-valley, forget-me-nots, and tuberous-rooted begonias were other shade-tolerant plants mentioned.[7]

---

[1]Martin Benson, "The Japan Iris," Vick's Monthly Magazine, XX (Aug., 1897), pp. 147-148.

[2]"Hardy Dutch Bulbs," Popular Gardening, I (Oct., 1885), p. 6.

[3]"Spring Blooming Bulbs," Vick's Monthly Magazine, XX (Sept., 1894), p. 161.

[4]"Mulching Bulb Beds," Gardening, I (Dec. 1, 1892), p. 84.

[5]Edward S. Rand, Jr., "City Gardens," American Journal of Horticulture, I (May, 1867), pp. 257-262.

[6]"Plants for Shady Places," The Gardener's Monthly, II (Aug., 1869), pp. 240-241.

[7]LER, "My Shady Corner," Vick's Monthly Magazine, XX (Aug., 1887), p. 146.

The general culture of perennials was discussed in the magazines. It was said that the belief that perennials would grow successfully if planted and left year after year was erroneous. The soil had to be kept up by a yearly top dressing of manure or leaf mould [sic]. It was also advised that the soil be dug into only when dividing the plants in early spring. An old objection to using perennials was their brief blooming season; however, it was emphasized that by wisely choosing varieties of the plants, continuous bloom might be obtained.[1] It was further stated that it was a shame that perennials were not more commonly used as bedding plants.[2]

Annuals became very popular chiefly because of their demand as bedding plants. However, the easier cultivation practices, as well as less time and smaller amount of money involved in raising annuals in comparison to perennials was pointed out.[3] Buying bedding plants such as geraniums, coleus and centaureas was expensive. It was indicated that the seeds of plants such as the Petunia, Phlox drummondi and Portulaca were very cheap and these plants would create an equally good effect in the various carpet beds.[4] Other annuals, balsams, asters, stocks, nastursiums and everlastings, were emphasized as good bedding

---

[1]E. L. Beard, "Culture of Hardy Herbaceous Plants," The American Garden, VI (March, 1885), p. 53.

[2]"Floriculture Progress," Magazine of Horticulture, XXX (Jan. 1864), pp. 9-12.

[3]I. L. Powell, "Annuals, Their Uses and Cultivation," The American Garden, XV (April 14, 1894), p. 220.

[4]"Flowers and Flower Beds," Vick's Monthly Magazine, I (Feb., 1878), pp. 39-41.

plants.[1] In defiance of the novelty passion, Edward S. Rand said that many of the five-year-old varieties were still as good as newer ones. Some of the neglected flowers to which he was referring were older varieties of verbena, heliotrope, and chrysanthemums.[2] As well as its uses as a bedding plant, the dahlia was known as one of the most desirable of the late blooming plants. The tuber was supposed to be placed in a warm place and allowed to sprout before planting time.[3] The single dahlia was also gaining favor, and authors applauded this as they said there was too much concern in the double forms of plants.[4]

The foliage plants were most admired abroad; however, the Coleus and Amaranthus became very popular as bedding plants. It was mentioned that the leaf color was not reliable from seed, and that these plants "seldom make much show" until midsummer.[5]

Insects, Diseases and Pests

Many insects attacked the rose. Among those reported were the rose caterpillar and the rose saw fly whose eggs developed into slugs. Syringing with white Hellebore solution, a tablespoon of the Hellebore

---

[1]J. Cornhill, "Annuals as Bedding Plants," Vick's Monthly Magazine X (Dec., 1887), pp. 367-368.

[2]Edward S. Rand, "Neglected Flowers," The Horticulturist, XX (Jan., 1865), pp. 4-7.

[3]Mrs. WAK, "The Dahlia," Vick's Monthly Magazine, XX (March, 1897) p. 74.

[4]"The Single Dahlia," Popular Gardening, I (May, 1886), p. 87.

[5]"The Amaranthus," Vick's Monthly Magazine, I (Dec., 1878), pp. 354-355.

to two gallons of water, was said to poison the slug.[1] Rose bugs or chafers had to be "hand picked" or brushed into a bucket of water. Syringing the underside of the leaf was the remedy for the red spider which was reported worse in hot dry weather. For the Aphis or green fly it was recommended that the ends of the shoots be dipped into a pail of tobacco or Quassia water. That thrips, more common in the west, were killed by a solution containing one pound of whale oil soap to eight gallons of water was the theme of an article in Popular Gardening.[2]

The red mite, "erroneously called by some the red spider" was controlled by spraying the under side of the leaves with a sulfur solution, or a solution of finely powdered tobacco.[3] Other powerful insecticides used, included Paris Green, which destroyed all chewing insects, and kerosene emulsion which killed the sucking insects.[4] Garden and Forest advised that the latter be used with caution.[5] A new insecticide in 1887, fir tree oil, was reported to kill mealy bugs without injuring the plant.[6] To kill scale insects it was recommended that the trunk and limbs of the infected tree be brushed with a stiff bristled brush dipped in strong soap suds.[7] Readers were reminded that winter was an

---

[1]Angus W. McIntosh, "Cultivation of the Rose," The Gardener's Monthly, XXI (Feb., 1879), pp. 35-36.

[2]"Insects Which Trouble Roses," Popular Gardening, I (June, 1886), p. 99.

[3]A. S. Packard, "The Red Mite on Verbenas," Garden and Forest, I (March 7, 1888), p. 20.

[4]"Tree Enemies," Meehan's Monthly, X (Nov., 1900), pp. 166-167.

[5]Packard, loc. cit.

[6]"Floral Gossip," Vick's Monthly Magazine, X (July, 1887), pp. 212-214.

[7]F. G. Sanborn, "Plant Lice and Scale Insects," The American Garden, II (Aug., 1867), pp. 85-90.

excellent time to fight insects by applying rags dipped in creosote to the egg masses.[1] For the elm beetle a spray of arsenate of lead or Disparene was said to be reliable.[2] The elm leaf beetles as well as other insects were causing great distress by 1900.[3] Manure water was excellent as an insect fighter since it increased the vigor of the plant and enabled the plant to outgrow the insect ravages.[4] Bordeaux mixture controlled the most important fungi diseases of the rose: black spot, mildew, and anthracnose.[5] The exact proportions of the Bordeaux mixture were 100 parts water, 2 parts sulfate of copper, and 2 parts of lime.[6] Copperas solution, which was merely sulfate of copper, was also recommended for "the destruction of small funguses" [sic].[7] A root fungus on herbaceous plants known as Agaricus melleus, was said to be controlled by soaking the soil with "copper infusion."[8]

During this period field mice remained a great problem. Trapping the mice in a trench four feet deep and wider at the bottom than at the top was one of the more drastic remedies recommended. Dough containing

---

[1]James Jensen, "Trees and Shrubs," Gardening, X (Feb. 15, 1902), p. 170.

[2]"The Elm Beetle," The American Garden, XXIV (June 20, 1903), p. 286.

[3]"Tree Enemies," Meehan's Monthly, X (Nov., 1900), pp. 166-167.

[4]Packard, loc. cit.

[5]"The Rose Garden," The American Garden, XV (March 24, 1894), p. 191.

[6]"Bordeaux Mixture," Meehan's Monthly, I (Jan., 1892), p. 10.

[7]"Copperas Solution," ibid., (De., 1891), p. 89.

[8]"Root Fungus," Meehan's Monthly, X (Dec., 1900), p. 180.

arsenic or phosphorous was suggested as a means of killing mice. Pointing up the addage, prevention is better than a cure, the magazines stated that much of the damage by mice might be avoided if old piles of straw and stones were destroyed before winter.[1]

Fertilizers

Through 1910 manure remained the most highly recommended fertilizer. Garden and Forest protested the various soil specifications for different plant genera maintaining that all plants would flourish if planted in well-rotted sod and top dressed with manure.[2] As early as 1885, commercial fertilizers such as Kainit, German potash salt were in common use in the east and south. Some writers reported that the artificial fertilizer was cheaper; for example, 600 pounds of Kainit would supply an acre of trees with the same nutrients that two tons of leached ashes, thirty-five bushels of stone lime and a top dressing of manure would.[3] Those favoring manure maintained that the vegetable matter or humus forming material in the manure rendered it much more valuable.[4] In using commercial fertilizers readers were advised to mix their own, due to chemists' reports of fraud in the preparation and sale of these fertilizers. Materials containing phosphoric acid, super

---

[1]E. A. Samuels, "Field Mice," The American Journal of Horticulture, I (Feb., 1867), pp. 109-114.

[2]C. L. Allen, "Soils," Garden and Forest, I (Dec. 5, 1888), p. 488.

[3]C. Hemingway, "Fertilizers for the Horticulturist," The American Horticulturist, I (May, 1885), pp. 324-325.

[4]Prof. Coldwell, "About Fertilizers," The American Horticulturist, I (Nov., 1885), p. 63.

phosphate, phosphate of lime, and nitrogen were reported needed for the make-up of better fertilizers.[1]

Wood ashes were still recommended as sources of potash, and coal ashes were said to be good as absorbents of liquid manure. It was emphasized, however, that coal ashes contained little plant food and used by themselves, served only to improve the mechanical texture of the soil.[2]

Propagation

During this period, there were very few magazine articles on propagation alone; methods of propagation were generally mentioned in connection with the culture of specific plants. One article in Vicks, however, discussed and illustrated propagation by seeds, cuttings, layering, budding and grafting.[3] It was said that cuttings rooted better if planted tightly in a shallow pan of wet sand rather than just put into water.[4] The great demand for new American plant introduction encouraged readers to save the seed from their finest plants, as an entirely different plant might appear.[5]

---

[1]C. Hemingway, loc. cit.

[2]J. J. Willis, "Coal Ashes and Wood Ashes," Vick's Monthly Magazine, XX (March, 1897), p. 79.

[3]"Methods of Propagation Illustrated," ibid., I (March, 1878), pp. 66-67.

[4]Daisy Eyebright, "How to Raise Cuttings," The American Garden, VI (April, 1885), pp. 84-85.

[5]Ella Guernsey, "Seed Saving," Vick's Monthly Magazine, X (Nov., 1887), p. 332.

Summary

In 1888 Garden and Forest reported that America offered great advantages to the gardener; namely, "an endless variety of scenery, the unrivaled richness of its native flora, and a wide diversity of soil and climate. With such advantages we may look forward to a time when this country will be a land of gardens. At present the gathering interest in planting should be properly directed and developed."[1]

It is not sufficient to mention only the widespread interest in home gardens portrayed in these magazines during this period. Great concern for the beauty of all America was evident in these civic conscious magazines. This endeavor for improvement of public lands was directed toward such projects as the establishment of parks. The growing interest in this area was well supported; in 1869 there were only two "well advanced" rural parks. By 1884 there were fifteen, and in 1897, Garden and Forest reported that there were parks in all cities.[2] There was also vital interest in the development and beautification of roads; in this area tree planting was the primary project.[3] By 1900 the American Park and Outdoor Art Association offered prizes for improvements in grounds around commercial plants as well as home grounds.[4] America was truly garden conscious and the public sentiment,

---

[1]"The Future of American Gardening," Garden and Forest, I (March 7, 1888), pp. 13-14.

[2]Garden and Forest, X (Jan. 13, 1897), pp. 11-12.

[3]"Making and Beautifying Roads," Vick's Monthly Magazine, I (Jan., 1878), pp. 2-6.

[4]"Encouragement to Planting Around Manufacturies," Meehan's Monthly, X (Feb., 1900), p. 22.

"convenience is endeavored to be rendered as attractive as possible, by combining it with the beautiful and the appropriate" pertained to private as well as public grounds.[1]

[1]C. B. N., "Pleasure Grounds--Design and Etc.," The Horticulturist, XX (Aug., 1865), pp. 264-266.

CURRENT TRENDS IN ORNAMENTAL HORTICULTURE
1910-1957

In studying two magazines, Flower Grower and Horticulture, that continued up to the present in the twentieth century, five of the most important articles of each issue were selected and listed according to subject matter. These results indicate trends in interest in ornamental horticulture as well as differences in the audience of the two magazines.

In the five volumes of Flower Grower, perennials remained the most popular topic. Their popularity rose to a peak in 1936-1937 and then declined. Articles dealing with the landscaping and care of the garden and the lawn progressively became more important. In 1916 and 1926, articles dealt more exclusively with one specific plant, with the interest centered around the plant itself; for example, gladiolus or tulip. In later years such articles were more general and more often entitled summer flowering bulbs or spring flowering bulbs.

As shown in Table I interest in annuals specifically has steadily declined. The exceptionally large number of articles concerning annuals in 1916-1917 is undoubtedly because the gladiolus naturally dominated The Modern Gladiolus Grower. This lower figure is not intended to indicate that annuals have become less important in the garden, rather that they are discussed now in terms of their function in the garden.

Another point of significance brought out in Chart I was the increasing interest in woody plants and the rather stable interest in roses after 1926.

In the early years of Flower Grower and other magazines, the weather wasan important topic; however, it had ceased to be as common a topic in 1936.

In Table II, which shows the subject of the five selected feature articles of Horticulture, the high interest in perennials is again noted. Woody plants and landscaping are also prominent topics. In 1946-1947 there is increased interest in insects and diseases.

Table III gives the topics of interest in the Gardener's Chronicle. Herbacious perennials again are the highest grouping with woody plants and landscaping following. The section, "Plants," concerned to a large extent with explorations, shows a steady increase.

In the magazine, The Home Garden, the topics of all articles of any consequence were included. In Table IV the great difference in the total number of articles for the years 1943 and 1952 is due largely to increased advertising. In spite of the inequality of the totals the emphasis on vegetables, fruits and herbs in 1943 points up the magazine's concern during war time. Diseases and insects as well as soil and fertilizers were of great interest to the Victory Garden owner. Vegetables became more important than herbacious perennials although the latter remained high. Gardening, landscaping, woody plants, methods of starting plants, and indoor plants were topics that appeared with almost the same frequency in 1943 and 1952 in spite of the difference in the total number of articles. It should be noted that propagation, photography, vegetables and herbs are not included as categories on the other tables. These topics did not play a major role in any of the other magazines studied.

The articles in Flower Grower indicate that it is written for the small home owner who, perhaps, has gardening as a hobby or simply wants to have an attractive yard. In the magazine, Horticulture, the strong appeal is directed towards members of Horticultural Societies, plant fanciers, who have more than a casual interest in gardening.

TABLE I

FREQUENCY OF TOPICS IN FLOWER GROWER

	Volume				
	III-IV 1916-1917	XIII-XIV 1926-1927	XXIII-XXIV 1936-1937	XXXIII-XXXIV 1946-1947	XLIII-XLIV 1956-1957
Plants		1		1	4
Herbaceous					
Perennials	20	17	26	17	14
Annuals	20	7	6	3	2
Woody					
Trees		3		4	3
Shrubs		2	4	3	7
Roses	2	10	10	9	7
Vines			1	1	
Indoor			1	6	1
Lawn				2	2
Weeds		1		2	
Cut flowers	3				
Fruit		5		2	1
Garden and Landscaping	9	7	7	5	13
Architecture		1	1	2	2
Equipment	1		1		
Fertilizer	1	1	1		
Insects and diseases			1	2	1
Weather	2	4			
Birds	2	1	1	1	1

TABLE II

FREQUENCY OF TOPICS IN HORTICULTURE

	July 1936-June 1937	July 1946-June 1947	July 1956-June 1957
Plants	1	2	4
Herbaceous			
Perennials	15	14	15
Annuals	3	2	2
Woody			2
Trees	3	4	4
Shrubs	9	8	8
Roses	6	3	4
Vines			2
Indoor	2	1	2
Lawn	1	1	2
Weeds	1		
Cut Flowers			
Fruit	2	1	2
Garden and landscaping	7	11	9
Architecture			
Equipment	1		1
Fertilizer	1	2	
Insect and Disease	3	8	2
Weather	1		
Birds	1	1	
Christmas Gifts	3	2	1

TABLE III

FREQUENCY OF TOPICS IN THE GARDENER'S CHRONICLE

	VOLUME XXXIII 1929	VOLUME XLIII 1939	VOLUME LIII 1949
Plants	5	7	8
Herbaceous			
Perennials	25	14	15
Annuals	5	2	4
Woody	3	4	
Trees	5	2	4
Shrubs	4	9	6
Roses	5	3	3
Vines	1	2	
Indoor		1	3
Lawn	1	1	1
Weeds			
Cut flowers			
Fruit			2
Garden and landscaping	9	8	10
Architecture			
Equipment			3
Fertilizer and soil	2	4	
Insects and disease		3	1
Weather			
Birds			
Christmas			1

TABLE IV

FREQUENCY OF TOPICS IN THE HOME GARDEN

	VOLUMES I AND II 1943	VOLUMES XIX AND XX 1952
Plants	4	8
Herbaceous flowering		
Annuals	19	12
Perennials	45	38
Woody		5
Trees	7	6
Shrubs	10	14
Roses	20	9
Vines	5	3
Vegetables	49	10
Herbs	13	3
Fruit	18	2
Lawn	10	3
Indoor	24	22
Cut flowers	15	9
Starting plants	15	12
Garden and landscaping	18	18
Soil	9	4
Fertilizer	11	2
Insects, diseases and pests	18	7
Photography	8	
Weather	2	
Birds	1	2
Totals	291	189

CONCLUSIONS

The agricultural and horticultural magazines discussed in this study reflect the character of a nation, by revealing the citizen's feelings toward their land and nature's gifts. The settler's resentment toward England, the strong desire for nationalism, prevalent in the United States through the early 1800's,[1] crept into the pages of these magazines in the form of protests against plants of foreign origin. America had to prove to itself and to the world that it could be independent, before it could accept anything foreign. At the same time the many articles taken from foreign periodicals evidenced America's longing for similar advancement in horticulture and the arts.

Great admiration for exotic plants developed around 1840, as the settlers became more confident in their new country. This desire for exotic plants became what many authors referred to as a fad in the latter part of the 19th Century. Native plants were felt common, therefore undesirable. At the turn of the century the magazines seemed to lose awareness of the exotic and indigenous character of plants; plants were no longer recommended on this basis. As they prospered Americans outgrew the fear of showing any dependence on another country; they became anxious to share the knowledge of the whole world.

As stated previously, the early information dealt with useful plants, either edible or profitable. Between 1860 and 1930 beauty

---

[1]Frank Luther Mott, A History of American Magazines 1741-1850, (New York: D. Appleton and Co., 1930), pp. 183-191.

became the most important feature of plants with such fashions as carpet bedding and ribbon planting becoming popular. At the same time magazines were protesting the formal garden (as well as fads) and pleading that nature's style of planting be copied. Thus developed the great concern for the perennial border with its background of shrubbery. In later years especially since World War II people have again considered the functional use of plants as employed in landscaping at the present time.

Horticulture was indeed very important to the early settlers of the United States. Previous to 1835 all of the agricultural publications drew attention to fruits and vegetables, but few contained articles concerning the culture of plants for beauty's sake. Ornamental horticulture could not compete with fruit growing, stock raising or general farming in a young country concerned primarily with the necessities of life.

The increasing concern for the use of ornamental plants is substantiated by the birth of numerous gardening magazines after 1835. That the later agricultural publications took a great deal of material from these horticultural magazines further indicates that people did not have time to devote to this phase of horticulture, for all magazines were anxious for contributions of any kind.[1]

The first writers were amateurs who used the magazines as a means of communication to exchange practices they thought beneficial to plants. These practices were often radical as the early magazines

---

[1]Mott, loc. cit., pp. 192-196.

encouraged anything new in hope that it might be the answer. For the most part these magazines took for granted that their audience had basic skill in agriculture and were particularly interested in newer methods and improvements.

The value of the information increased greatly in the 1830's when gardeners, nurserymen and botanists became frequent contributors to the magazine. These men represented a school with far more practical experience than previous writers. As scientific knowledge increased contents of these magazines became more reliable. At the present time the authority writing the article or editing the magazine is accepted without question; however, with science in the advanced state the public has no reason to be as dubious as in earlier years.

The modern gardening magazine, such as the Flower Grower, is written for the amateur. It gives complete instructions about the culture of the plant, not simply what is new, but the basic information. This magazine appeals to the increasing number of people who have more leisure time. The changes in this magazine alone from 1914 when it was The Modern Gladiolus Grower, until the present Flower Grower, show how it responded to changing economic conditions which have allowed gardening to become the hobby of many.

The first horticultural magazines were directed to the more wealthy as they were the first who could afford gardens. In contrast the garden magazine of today has adopted a popular tone. They strive to appeal chiefly to the interests of the middle class American, although

they contain material of interest to all plant fanciers. Articles on how to landscape the small yard have replaced those concerning the care of estates.

The popular trend in American gardening, known as "Do it yourself" has been aided a great deal by the advanced garden tools and equipment. The very simplest equipment first to evolve, such as the English aphis brush, was reported in magazines with great enthusiasm. Today's complex gardening equipment is accepted as a part of the garden; the care of this equipment is a frequent subject in magazines.

The architect's promotion of outdoor living, as well as his use of indoor planters, in modern homes has increased the interest in ornamental plants. They have become a part of American life.

To return to the wisdom of earlier years it may be said that man's taste for gardening today reflects Teschemacher's sentiment in 1835 when he began the first horticultural magazine. "The love of gardening is natural to the human race. The inclination to seek enjoyment in cultivating a garden is not only the delight of childhood, but also the solace of old age."[1]

---

[1]"Introduction," The Horticultural Register and Gardener's Monthly, I (Jan., 1835), p. 1.

BIBLIOGRAPHY

Primary Sources:

The Agricultural Museum. Vols. I-II. Georgetown, 1810-1812.

The American Agriculturist. Vol. I and Vol. X. New York, 1843 and 1851.

The American Farmer. Vol. I and Vol. X. Baltimore, 1819 and 1828.

The American Garden. Vols. VI, XV, and XXIV. New York, 1885, 1894, and 1903.

The American Horticulturist. Vol. I. Detroit, 1885.

The American Journal of Horticulture. Vols. I-II. Boston, 1867.

The Cultivator. Vol. I and Vol. X. Albany, 1834 and 1844.

The Farmer's Companion and Horticultural Gazette. Vol. I. Detroit, 1853.

The Farmer's Register. Vol. I. Richmond, 1853.

Flower Grower. Vols. XIII, XIV, XXIII, XXIV, XXXIII, XXIV, XLIII, and XLIV. New York, 1926, 1927, 1936, 1937, 1946, 1947, 1956 and 1957.

Garden and Forest. Vols. I and X. New York, 1888 and 1897.

The Gardener's Chronicle of America. Vols. XXXIII, XLIII, and LIII. New York, 1929, 1939 and 1949.

The Gardener's Monthly and Horticultural Advisor. Vols. II, XI and XXI. Philadelphia, 1859, 1869, and 1879.

Gardening. Vols I, X, XX, and XXX. Chicago, 1893, 1902, 1912 and 1922.

The Genesee Farmer and Gardener's Journal. Vol. III. Rochester, 1833.

The Genesee Farmer, devoted to Agriculture and Horticulture. Vol. VI. Rochester, 1845.

Home Garden. Vols. I-II and Vols. XIX-XX. New York. 1943 and 1953.

The Horticultural Art Journal. Vol. I. Rochester, 1886.

The Horticultural Register and Gardener's Monthly. Vol. I. Boston 1835.

Horticulture. Vols. XXXVI, XXXVII, XLVI, XLVII, LVI and LVII. Boston, 1936, 1937, 1946, 1947, 1956 and 1957.

The Horticulturist and Journal of Rural Art and Rural Taste. Vols. I, X, and XX. Albany, 1846, 1855, and 1864.

Magazine of Horticulture. Vols. I, X, XX and XXX. Boston, 1835, 1845, 1855, and 1865.

The Michigan Farmer. Vols. III and XIII. Jackson and Detroit, 1845 and 1855.

The Modern Gladiolus Grower. Vols. III and IV. Calcium, 1916 and 1917.

Meehan's Monthly. Vols. I and X. Philadelphia, 1892 and 1900.

The New England Farmer. Vols. I-IV, No. 20. Boston, 1822-1825.

The New England Farmer and Horticultural Journal. Vol. X. Boston, 1832.

The New England Farmer and Horticultural Register. Vol. XX. Boston, 1851.

The Northwestern Farmer and Horticultural Journal. Vol. II. Iowa, 1858.

The Ohio Cultivator. Vol. V. Columbus, 1849.

The Ohio Valley Farmer. Vol. III. Cincinnati, 1858.

Real Gardening. Vol. II. New York, 1939.

Popular Gardening and Fruit Grower. Vol. I. New York, 1896.

Vick's Monthly Magazine. Vols. I, X, and XX. Rochester, 1878, 1887, and 1896.

Secondary Sources:

Bailey, Liberty Hyde. The Standard Cyclopedia of Horticulture. Vol. II. New York: Macmillan Co., 1947, pp. 1559-1560.

Barnett, Claribel R. "The Agricultural Museum, an Early American Agricultural Periodical," Agricultural History. Vol. II. (April, 1928), pp. 99-102.

Demaree, Albert Luther. The American Agricultural Press, 1819-1860. New York, Columbia University Press, 1941.

Duncan, Joseph George. The Michigan Farmer, A Century of Agricultural Journalism 1843-1943. Unpublished Master's Thesis, Michigan State University, 1950.

Mott, Frank Luther. A History of American Magazines 1741-1850. Vol. I. New York, D. Appleton and Co., 1930.

Traub, Hamilton Paul. "The Development of American Horticultural Literature, Chiefly Between 1800 and 1850," The National Horticultural Magazine. Vol. VII. (July, 1928), pp. 97-103.

Tucker, Gilbert M. American Agricultural Periodicals: An Historical Sketch. Albany, New York, privately printed, 1909.