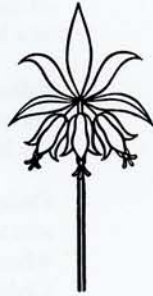


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Some early American horticultural writers and their works: II. William Coxe, and John Gardiner and David Hepburn

Dorothy S. Manks

WILLIAM COXE (1762-1831)

BIOGRAPHY

William Coxe, a native Philadelphian, was born 3 May 1762 to William and Mary (*née* Francis) Coxe. He died in Burlington, New Jersey, 25 February 1831. Unlike most of the early horticultural leaders, he was born into a family of wealth and culture, and shared in the social and intellectual life of Philadelphia at the height of that city's greatness. Social dislocations of the Revolutionary War made formal schooling impossible for him, but the informal schooling he received at home and his own love of books fitted him for a life of leadership and public service. From those who knew him we get a picture of a handsome man, generous with his personal interest, with his fine library, and with the fruits of his orchard. He had "old fashioned" courteous manners and an easy way with children. "An errand to Mr. Coxe's was a cherished privilege."¹

William Coxe's great-grandfather Daniel founded indirectly the American branch of the family. Though he never saw the New World himself, he held by purchase large grants of land in New Jersey, and he speculated heavily in rights to lands extending to the Mississippi. These western claims were apparently never confirmed, but he was for some years the nominal Governor of New

Jersey. He was a man of varied talents, for he received a degree in medicine from Cambridge University, was physician to Charles II and to Queen Anne, and wrote on chemistry and medicine.²

William's grandfather, also Daniel, came to America in 1702 to represent his father's interests. Although one gathers that he was not sympathetic to the colonial cause and hence was not popular, he held various appointments from royal governors. He is credited with writing the first proposal for a political federation of the colonies, and was the first Grand Master of Masons in America.³ William's older brother, Tench Coxe, was also a man of influence—a political economist, legislator, judge, and Attorney General of Pennsylvania.⁴

William became a member of the Pennsylvania legislature, served with short intermissions between 1796 and 1817, and was Speaker of the Assembly from 1798 to 1800 and in 1802. In 1813 he was elected to the United States Congress. Daniel Webster was there at the same time, and mutual interest in horticulture drew them together.

In 1789 William married Rachel Smith, a member of another prominent Philadelphia family. Five years later he began an experimental orchard on his wife's property in Burlington, New Jersey, across the river from Philadelphia. Here he collected varieties of fruits from the

United States, England, and France, and made studies in their culture and propagation "on a scale more extensive than has been attempted by any other individual in this country."⁵ His cider was famous in a time when cider was a characteristic American beverage.⁶ The Delaware River region is indebted to him for his pioneer work in the development of fruit growing (for which it is still famous). The whole country has benefited from his introduction of many fine varieties of fruit, especially peaches.⁷

Although Coxe was described as a "merchant," we know only one fact of his business career. In 1806 he engaged, apparently as financial backer, in the local nursery firm of Daniel Smith and Company. Rare advertisements of their stocks are in the libraries of the United States Department of Agriculture, Rutgers University, and the Massachusetts Horticultural Society. New Jersey was at that time the fruit-growing center of the country, so it is natural that Coxe's advice was constantly sought. His book, *A view of the cultivation of fruit trees and the management of orchards and cider*, was written for the purpose of answering the flood of questions.

About any prominent man, one may come across stories of the category "interesting if true." Andrew Jackson Downing (a usually reliable historian) wrote one about Coxe which should, apparently, be corrected. Downing wrote, "Mr. Coxe was made an honorary member of the Horticultural Society of London . . . in consequence of his making known to the members the great value of the Seckel pear . . . but in a few years he declined this honor, being unwilling to receive their valuable publications for so trifling a contribution."⁸ Such discourtesy from a

well-bred man bore looking into. A search of contemporary volumes of the *Transactions of the Horticultural Society of London*⁹ gave conflicting stories about the pear, and published membership lists fail to show Coxe's name. A letter to the present Secretary of the Royal Horticultural Society brought the answer, "We have searched such of our early records as exist but there appears to be no mention of William Coxe having been a member of the Society."

Toward the end of Coxe's life, financial reverses led him to sell the big estate and move to a smaller farm "near town." In retirement he was "devoted to his family and his books, always manifesting a warm interest in the church of which he was a member, and keenly alive to the comfort of the poor families by whom he was surrounded, frequently making sacrifices to give them employment, especially through the winter months."¹⁰

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A view of the cultivation of fruit trees and the management of orchards and cider. Philadelphia, 1817.

Collation: [iv], 5-253, [15] pp., 22 cm.

Contents: [i] title. [ii] registration certification. [iii-iv] contents. 5-253 text, comprising: chs. 1-13, orchard management, 5-57; chs. 14-22, making of cider and vinegar, 58-99; chs. 23-30, descriptions of fruit varieties, 100-253. Index [15] pp.

Illustrations: 77 plates (woodcuts), unnumbered, illustrating 200 varieties of fruits in natural size.

Printer: D. Allinson.

Publisher: M. Carey and Son.

Date of publication: 1817 (after 1 November).

COMMENTARY

This work of William Coxe's¹¹ was the first book on pomology of purely American origin. In itself this would make it important, but it does not need any artificial prop. It is good horticulture well written, and can hold its own in any company. Twenty years of practical experience went into the making of it. So did extensive reading. Coxe received the current books and periodicals of the European specialists and knew all the important horticulturists and their work.

This is not the place to review early-19th-century fruit-growing techniques, but a few details will be enlightening here. Coxe followed his great Belgian contemporary Jean Baptiste Van Mons in believing that the best varieties derived from seeds of cultivated trees, which "produce more perfect and vigorous plants, even though varying widely in color, flavor, size."¹² The approved grafting technique was on second-year stock, done just below ground line, where "the covering of earth sufficiently protects the cions [*sic*] from the air and sun"¹³ (no binding, no waxing). To encourage a compact root mass, Coxe advised transplanting twice, with special care not to injure the root system.¹⁴ Careless handling must have been a common fault, for he was emphatic on this point. He had been reading about the experiments of the Englishman Thomas Andrew Knight in plant physiology, and he reported his own "curious discovery in the natural history of fruit trees"—the technique of pollination and the fact that "some of the products partook of the properties of the male, others of the female parent, and in some, both were blended."¹⁵ He quoted Knight at length, too, on the latter's recent discoveries con-

cerning the growth of bark and the flow of sap, and their application to budding and grafting.¹⁶

Coxe was a careful teacher, for in discussing each phase of orchard operation he explained the objective and he analyzed the results of both good and bad techniques. His description of each variety gives the appearance of the fruit, appearance of the tree, time of ripening, uses for table, cooking, and cider. There are occasional notes of synonyms and on importation of foreign varieties. So much accurate detail must surely have been based on observant field work and careful records. The illustrations are life-size, showing the outlines of the fruits and suggesting their forms.

Coxe planned a second edition and had collected some material for it. His daughters had prepared colored drawings for about 160 varieties, more than 100 of them apples and crabapples. The drawing of the Seckel pear sent to the Horticultural Society of London was published in their *Transactions*¹⁷ and is in marked contrast to the crude work of the first edition. The whole collection of these drawings, with Coxe's revised manuscript material, is now in the National Agricultural Library.

Later pomologists have relied on Coxe's work. It was the basic manual until the publication of Andrew Jackson Downing's *Fruits and fruit trees of America* in 1845. Downing's own appraisal of Coxe's book was, "it is a work exhibiting study, nice observation, and an amount of practical knowledge highly creditable to the research of the author; it continues to be valued by pomologists, and to be quoted by them with approbation."¹⁸ In 1878 Robert Manning Jr., another great American horticultural historian, called

it "very accurate and still an authority among pomologists."¹⁹ Hedrick in the 20th century ranked Coxe still as one of the great American fruit specialists and his book as his chief contribution.²⁰

As early as 1856, Downing referred to Coxe's book as "now so celebrated, and so scarce,"²¹ and it remains one of the very rare volumes in American horticultural literature. There are copies in the libraries of the Massachusetts Horticultural Society and the Arnold Arboretum.

JOHN GARDINER (?-?) and
DAVID HEPBURN (?-1804?)

BIOGRAPHY

It would be hard to find two authors of whom less is known than John Gardiner and David Hepburn. Both their names appear in the registration certification of their book,²² but the Library of Congress records no birth or death dates for either, and there are mere fragments of fact to be found in the text. Other than in the registration, Gardiner's name appears only in the prospectus of the second edition.²³ As to Hepburn, the registration certification in the first edition (dated 18 October 1804) reads, "John Gardiner and David Hepburn of the district aforesaid (late gardener to Gov. Mercer and Gen. Mason) . . ." ²⁴ Following the text there is a testimonial to Hepburn which confirms his death sometime during the year 1804.²⁵ It is worth quoting in full:

Having been applied to, by friends of the late David Hepburn, one of the authors of a little work on gardening, which he left in the press, to state my knowledge of him, and my opinion of his competency to such a production, I can with great truth say, he was well skilled in all the various branches of

gardening, and that he was a worthy and honest man. He was in my employ for six years on my Island opposite to this town, during which time he conducted all my improvements at that place, and I parted with him with great regret, when he left me to go into business for himself, about two years ago. As a practical man in the culture of vegetables and fruit trees, I do not believe he could have been excelled.

J. Mason

Georgetown, 20 Nov. 1804.

The Columbia (D.C.) Historical Society has supplied an entry from W. W. Bryan's *History of the National Capital: "Within the city up to the year 1807, David Hepburn, a gardener, occupied a portion of the square bounded by Sixth, Seventh, and B. Streets and Maryland Avenue, S.W."* If the date 1807 is correct and our subject's business closed at his death, this must, of course, refer to another David Hepburn. If the date is an error or the business continued, perhaps the location of our Hepburn's nursery has been established.

Both authors were, it seems, British. In the prospectus to the second edition, Hepburn is described as "a gardener of forty years experience, twenty in England and twenty in this country." In the preface to the first edition, Gardiner's nationality as well as Hepburn's is suggested by the sentence beginning, "Could the Authors have met with such a publication on their arrival in America . . ." ²⁶

Shares of authorship in this joint work might seem a trifling detail if it were not for a bland assumption by W. Miller that although Gardiner's name appears first on the title page "it may be inferred

that the practical experience in the book is almost wholly Hepburn's."²⁷ Miller was usually a careful commentator, but here he offered no proof except those "forty years experience." He ignored the description of Gardiner as "a person of skill and experience in horticulture."²⁸ The section in the second edition called "Fences and walks" seems further evidence of Gardiner's ability, for it is the work of a well-informed plantsman.²⁹ Hepburn had been dead 14 years when it was published. One may ask logically, if John Gardiner did not write it, who did?

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The American gardener . . . by John Gardiner and David Hepburn . . . City of Washington, 1804.

Collation: [iv], [5]-204, [4] pp., 16 cm.

Contents: [i] title. [ii] registration certification. [iii] preface. [5]-204 text, divided into: Garden calendar [5]-99; Part second, Fruits, flowers and shrubs [101]-183, Hop yard 183-186, Hot houses [187]-195, Green houses [196]-204. Testimonial from J. Mason, dated 20 November 1804 [205]; subscribers' names [206-207]; errata [208].

Printer: Samuel H. Smith.

Publisher: Authors.

Date of publication: registration certification dated 18 October 1804.

The American gardener . . . by John Gardiner and David Hepburn; a new edition, much enlarged. To which has been added A treatise on gardening, by a citizen of Virginia. Also, a few hints on the cultivation of native vines, and directions for making domestic wines. Georgetown, D.C., 1818.

Collation: [xii], [13]-[348] pp., 16 cm.

Contents: [i] title. [ii] registration certification. [iii]-ix Prospectus. [xi] original preface. [13]-[348] text, divided into: Introduction [13]-17, Kitchen garden [19]-116, Fences and walks 117-161; Part second, Fruits, flowers and shrubs [163]-247, Hop yard 247-250, Hot houses [251]-259, Green houses 259-267. Treatise on gardening, by a citizen of Virginia [269]-331; To make veals [332]-333; Grapes and wines, Vinegar, Tomato ketchup [334]-[348].

Publisher: Joseph Milligan.

Date of publication: Registration certification dated 18 May, "in the forty-second year of the Independence of the United States of America."

The American gardener . . . by John Gardiner and David Hepburn. A new edition, much enlarged. To which is added, A treatise on gardening, by a citizen of Virginia. Also, a few hints on the cultivation of native vines and directions for making native wines; third edition. Washington City, 1826.

Collation: vii pp., 1 l., [11]-304 pp., 18.5 cm.

Contents (partial): A treatise on gardening by a citizen of Virginia [237]-288.

Publisher: W. Cooper, Jr.

The *National union catalogue* lists a fourth edition (Washington City, 1831) not seen; it may be simply a reprint of the third edition, the title and pagination appearing to be the same.

COMMENTARY

This is good, workman-like writing. The authors went straight to essentials, and

assumed that their readers, like themselves, were well-informed. It has the flavor of shop-talk between professionals. Another reviewer, impressed by the same quality, called it "a delightful volume . . . Its month by month instructions are valid today for gardeners of the Organic school."³⁰

Only two American books on general gardening preceded this work: Martha Logan's *The gardener's kalendar*, published in 1779, and Robert Squibb's *The gardener's kalendar for South Carolina, Georgia and North Carolina*, published in 1787, both of southern origin. A book for the north was needed. As the preface to the first edition has it, "Could the Authors have met with such a publication on their arrival in America, some crops which they lost would have rewarded their labours; and they trust that all who have been in the habit of consulting European gardening books will find their advantage in giving this a preference."³¹

The main text was divided into "Garden calendar" (called "Kitchen garden" in the second edition) and "Fruits, flowers and shrubs," each developed in calendar style. Small but useful sections followed on the hop garden, hot houses, and green houses.

In the second edition this text was untouched except for the insertion of a long footnote covering most of pages 20 to 22. The "enlargement" was the addition of two extensive new sections, one called "Fences and walks"³² and the other the "Treatise on gardening . . ."³³ The testimonial to Hepburn, the list of subscribers, and the errata were omitted.

"Fences and walks" begins with a study of certain problems of landscape planning, and an appraisal of the good and bad qualities of wooden fences, stone and

brick walls, and live hedges. This is delightful, for it was written with a keen eye for design and awareness of practical considerations. It goes on to survey plant materials suitable for permanent living fences. The long discussion there of *Pyracantha*³⁴ was written by Thomas Main. It is of special interest as an unexpectedly early record in American literature. He told of seeing a handsome espaliered specimen on the Isle of Wight in 1796 "when being employed in collecting different kinds of plants to bring over here," and went on to a detailed account of experiments and chance discoveries during its propagation in his American nursery. This was so carefully reported that it should be of interest to a present-day propagator. To establish the identity of the species he referred to Martyn's edition of Miller's *Gardener's dictionary*,³⁵ where the Linnaean name *Mespilus pyracantha* was used. This species is now known as *Pyracantha coccinea* M. J. Roem.³⁶

The most famous section of the second edition is "A treatise on gardening, by a citizen of Virginia."³⁷ Its style of writing and method of treatment are quite different from those of the main work. There is a brief editorial introduction which says in part, "The annexed little Treatise was written many years ago by a learned and eminent Citizen of Virginia . . . who printed it for the use of his friends."³⁸ The plants (vegetables, herbs, and a few small fruits) are in alphabetical order with comments on their culture. There is a brief calendar of operations.

Two phrases catch the imagination—"by a . . . Citizen of Virginia" (who was he?), and "written many years ago . . . printed . . . for the use of his friends" (when and in what form?). Both these questions are discussed in the definitive

study by Marjorie Fleming Warner, the late bibliographer of the United States Department of Agriculture. The following notes are based on her findings, and are intended only to suggest the lines of research she covered so thoroughly and interestingly.³⁹

Miss Warner credited authorship to John Randolph (1727-1784), who was a member of an aristocratic Williamsburg family and is known to have been an expert and enthusiastic gardener. On the strength of her research this attribution is accepted everywhere as correct. From internal evidence, Miss Warner estimated writing and publication to have occurred between 1760 and 1765. In any case, she was sure that this was the first work on gardening published in America, and the only one for 50 years not in calendar form. Since it was "printed for the use of his friends," it may have come from a private press or been a supplement to the *Virginia gazette*. As there is no complete archive of that newspaper, one cannot be sure. At any rate, the "Treatise" does not appear in the English publishing records, as would have been likely for a printing from a commercial press.

Miss Warner's internal evidence is most interesting, for she found the contents to be largely compiled from Philip Miller's *Gardener's dictionary*, either the sixth folio edition (1752), or its abridgement (1754), with added remarks on Miller's methods. Her opinion was that the little work "has an imperishable interest for the student of agricultural history because of its careful adaptation of English methods to the Virginia conditions, and his comments, although few, as to varieties peculiar or specially suited to Virginia." The revised edition published in 1826 was called *Randolph's culinary gardener*. It sheds little

light on the mystery of authorship, for it only credits "Mr. Randolph" who lived in Williamsburg.

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24. *Ibid.*, p. [ii].
25. *Ibid.*, p. [205].
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28. Gardiner and Hepburn. *American gardener*, ed. 2, p. iv.
29. *Ibid.*, pp. 117-161.