

Bartram Broadside



Published by the John Bartram Association for the "noble & curious friends" of Historic Bartram's Garden, Philadelphia

Preface

This issue of the Bartram Broadside deals with Moses Bartram, the son of John Bartram. Moses inherited his father's intellectual curiosity, and his love for exploration. He took to the sea and traveled the world. Moses spent close to a decade from 1751 to 1759 in a series of voyages as a seaman and master. He was the only member of the Bartram family to actually meet Peter Collinson, and Collinson aided Moses in 1751-1752 when he was stranded in London on his first trip as a seaman. Collinson would ever refer to him as "poor Moses" and encouraged him to write an account of his life at sea: "I question if it is to be paralled, Wee don't know what Human nature will Bear untill it is Tried."

Moses Bartram was probably the most urbane of John Bartram's children. It is not surprising that we know more about his life than any of his siblings, excluding William. When Moses settled in Philadelphia as an apothecary, he became an important fixture in the life of the city. His activity during the Revolution and the formation of the Free Quaker Meeting are a history in themselves, and may form a future issue of the Bartram Broadside.

Moses was also an important, unrecognized influence on his brother William. William's "Commonplace Book" contains drafts of two letters to Moses, probably written in 1771 or 1772. Referring to himself as a "tardy genius," William wrote, "... remembrance holds up to my view my Brother's my Preceptor's care. When I so young thou gavest me the first rudiments of botanic Philosophy."

Joel T. Fry, Curator

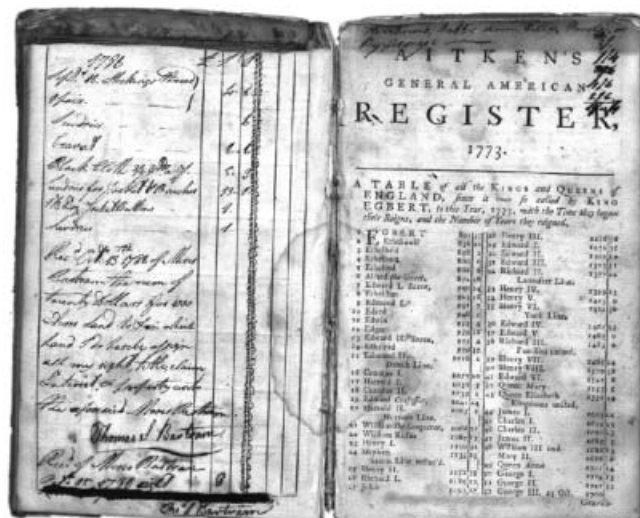
Moses Bartram's Account Book 1778-1788: Notes made by a Philadelphia Apothecary.

Eleanora Gordon Baird, MD

In 1997 the John Bartram Association purchased a copy of a small almanac, *Aitken's General American Register and the Gentleman's and Tradesman's Complete Annual Account Book, and Calendar for the Pocket or Desk... 1773*, from a rare book dealer in Virginia.¹ This pocket-sized volume contained a printed bookplate of Moses Bartram, dated 1781. The book consists of a calendar and almanac for 1773 with pages for accounts, and a printed section of subjects of general interest. These include a list of the rulers of England from Egbert to George III, a roster of European monarchs and their relatives, and a description of the history and administration of colonies of North America including Nova Scotia and Newfoundland. The section containing a description of Pennsylvania is extremely detailed and even lists the admission requirements and the curriculum of the Academy and College of Philadelphia, the ancestor of the University of Pennsylvania. Notes in the hand of Moses Bartram (1732-1809)—a Philadelphia apothecary, and the son of John Bartram (1699-1777); and remarks written by Moses Bartram junior (1768-1791), his second son, fill the account pages and flyleaves.² The top margin of the almanac and account pages for 1773 have been cut away.

By far the largest portion of the book, approximately one hundred pages, contains notes by Moses Bartram senior dated from 1783-1788, recording prescriptions and medications dispensed by him. The notations are in more or less chronological order but have many gaps. Moses junior made sporadic personal and business entries in the book through 1785.

It is not clear exactly how the Bartrams used this little book. Although Moses senior wrote plentiful notes about his business



Aitken's General American Register, 1773, at the middle of the volume beginning a section describing the government of England and her North American colonies. Some of Moses Bartram senior's accounts for 1786 are on the facing page, left. (John Bartram Association).

transactions from 1783 to 1788, it was by no means a formal ledger. We can speculate that Moses junior took possession of *Aitken's Register* in the year 1778 at the age of nine and cut out the dates for 1773. Eventually Moses senior found the book lying around the house and appropriated it for quick jottings. Moses junior wrote in it from time to time for a year or so after his father appropriated it. He assisted his father in his business, and the book might have been kept in the shop. Moses junior also recorded a few accounts from a partnership with David Christie, attending patients in the city, possibly for his father.

Although the actual usage of this little pocket notebook remains unclear, an examination of its contents stimulated further investigation into the trade of apothecary as practiced by Moses Bartram, and into the tragically brief career of his gifted son. Moreover an analysis of the medications dispensed provides an excellent example of the theory and practice of late eighteenth-century medicine.

Moses Bartram, the second son of John and Ann Mendenhall Bartram, took up the trade of an apothecary after a detour of a life at sea, first as a sailor then as the master of a merchant vessel. In 1760 at the age of twenty-eight he returned to Philadelphia for good, and joined his older half-brother Isaac Bartram (1725-1801) in his apothecary shop at the sign of the Bottle and Three Bolt Heads, 58 North Second Street between Mulberry (Arch) and Sassafras (Race). Isaac had been in partnership with the elder Thomas Say (1709-1796), a successful apothecary, and the grandfather of Thomas Say (1787-1827), the naturalist, at that location since 1756. After Thomas Say left the business, Isaac took on his young brother Moses, trained him, and worked with him until 1772. In 1764



“... an analysis of the medications dispensed provides an excellent example of the theory and practice of late eighteenth-century medicine.”

Moses married Elizabeth Budd (1742-1808), a step-daughter of Thomas Say. Brother Isaac moved to his own shop on Third Street in 1772, while Moses remained in the Second Street establishment where he lived and prospered until the last year of his life.³

Apothecaries in late eighteenth-century Philadelphia, unlike those in rural areas, were not likely to actually practice medicine as such. John Morgan, the enormously influential physician who helped design the medical school curriculum for the College of Philadelphia, held a strong belief that medicine, surgery, and pharmacy should be three separate disciplines.⁴ In his will Moses Bartram referred to himself as “druggist.”⁵ He had been a dealer, a dispenser of medicines and advice to the public, and a resource for physicians to fill prescriptions. He functioned much as a modern independent pharmacist. By 1785 the trade was thriving. In that year there were twenty apothecaries in the city of Philadelphia. Almost all of them were located in the neighborhood of Market and Second Street.⁶

In the late eighteenth and early nineteenth centuries the theoretical basis for therapy was still derived from the ancient doctrine of the humors. Most illnesses were not considered a specific disease but rather a collection of symptoms brought on by an imbalance of the fluids of the body. The purpose of treatment was to restore equilibrium and stabilize the system. Fevers, traditionally considered unhealthy, could be extinguished, it was believed, by opening the pores to produce a sweat. Cathartics and emetics eliminated the noxious materials, which might have caused the illness. Opiates dulled pain, calmed restlessness, and soothed the bowel. Medication by whatever route was supposed to produce a demonstrable effect to show that harmony was being restored in the body. Thus violent and repeated vomiting, purging, and profuse sweating were considered curative. Medications were administered by mouth in the forms of pills, powders, elixirs (drugs in an alcoholic base), electuaries (drugs administered in a sweetened paste), topically as ointments, blisters, or plasters, and by injection with a syringe into the rectum or urethra.

An advertisement placed by Isaac and Moses Bartram in the *Pennsylvania Gazette* of February 28, 1760 lists typical items stocked by apothecaries of the period. Available for the public are a large assortment of patent medicines, basic medications for

compounding prescriptions and equipment.

For the most part the drugs in the account book kept by Moses senior are standard eighteenth century medications. Jalap, Glauber's Salts (also commonly used in horses) and Epsom Salts were popular cathartics. Nitre (saltpeter) produced a beneficial sweat. Tartar emetic and ipecac brought on vomiting. Calomel and other forms of mercury such as corrosive sublimate (mercuric chloride) were prescribed for venereal disease or as cathartics. Bartram made up powders ahead of time for common symptoms. Refrigerant powders, fever powders, and emetic powders appear frequently in the record. The medications listed in the account book were certainly not the only drugs dispensed by Moses Bartram. For example there is no mention of proprietary preparations such as Godfrey's cordial (a solution of opium), or Lockyer's pills (for catharsis and emesis) which certainly would have been in demand. The medications listed in the account book comprise a random but representative selection. A list of all the legible medications and their uses appears in the appendix. Although John and William Bartram had a thorough knowledge of herbal remedies, a review of the account book shows that Moses showed no particular preference for them. The herbals which do appear in the record, such as the mild sedative valerian, were commonly prescribed by practitioners of the period.

Some orders were obviously for the benefit of customers who stopped in the shop and asked for something to alleviate their symptoms. For example William Harrison, a sailor, dropped by and paid three shillings for two ounces of an opiated liniment for his pain. Other records are more formal. There is no indication whether a given prescription was filled by order of a physician or was simply compounded by Bartram for a customer seeking relief. The following prescription, paraphrased from the Latin, is typical:

<i>Glauber's Salts</i>	<i>1 ounce</i>
<i>Cream of Tartar</i>	<i>2 ounces</i>
<i>Tartar emetic</i>	<i>5 grains</i>
<i>Calomel</i>	<i>12 grains</i>

Make into 24 doses. Take one twice daily.

This would have been a fairly strong cathartic. One would not expect the patient to take more than a few doses.

Some orders included the loan of necessary equipment:

1784 April 15
Jr. Small (gonorr.)
Refrigerant powder
Gallipot
Antivenereal injection
Syringe ...

Bartram also provided medical supplies in bulk. On

Just imported in the Snow Two Brothers, Captain Neal, and to be sold by

ISAAC and MOSES BARTRAM;
At the Sign of the Bottle and Three Bolt Heads a little above the Sign of the George, In Second street, at Thomas Say's,

ALARGE Assortment of Drugs, chymical and galenical Medicines, Godfrey's Cordial, Bateman's Drops, Bannister's Drops, Duffy's and Squire's grand Elixir, British Oil, Lockyer's Pills, Anderson's Scotch pills, Hooper's female pills, prest and unprest Saffron, Antimony, Epsom and Glauber Salts, Cream and Salt of Tartar, Tartar Crude, white and red Lead, Verdigrease,⁷ Litherage,⁸ Crucibles, Sagg,⁹ Jollop,¹⁰ Anniseed,¹¹ Juniper Berries, Saltpeter, Camphire, Phial, Retorts and Receivers in Sorts &c. too tedious to mention; Where also may be had as usual, Chests or Boxes of Medicines, carefully put up for Captains of Vessels, or Families living at a Distance from Doctors, at a reasonable Rate, with proper Directions.

Advertisement for Isaac and Moses Bartram's apothecary shop during the first year of their partnership, from the Pennsylvania Gazette, February 28, 1760.

“Medication by whatever route was supposed to produce a demonstrable effect to show that harmony was being restored in the body.”

June 7, 1783 he sold to a “Gentleman (in the Jerseys)” twenty-two refrigerant powders, twenty mercury pills, and twenty doses of Epsom Salts. On September 1, 1784 Isaac Davis of Pewter Platter Alley bought a box of cathartic powders and six doses of powders to cure diarrhea for 1 pound, 10 1/2 shillings, and 6 pence.

Customers paid in cash or in kind:

May 7 1787

Jr^s. Harden C^r. by soaling & heel taffers? a pair of shoes

[May] 29 Jacob Krainer C^r. By 1 pair of Shoes...

August 20 1787

J^s. Bolton C^r. by a pair of silver Knee buckles in full of his account

Jacob Conines C^r. by Shoes 1 pair

In the spring of 1787 there must have been an increase in the usual number of cases of smallpox in Philadelphia. Moses senior made the following entries:

April 24th 1787

Mr. Knight To Inoculate his Child with Med. Attend. &c.

May 1st Jacob Krainer To Inoculate his child with Med. Attend. &c.

[May] 2nd Harden to Inoculate his child with Med. Attend. &c.

[May] 16 W^m. Sellers To Inoculate two children with Med. Attend. &c.

[May] 22 A. To Inoculate a ch^d. With Med. Attend. &c.

Mr. Basset To Inoculate his Ch^d. With Med. Attend. &c.

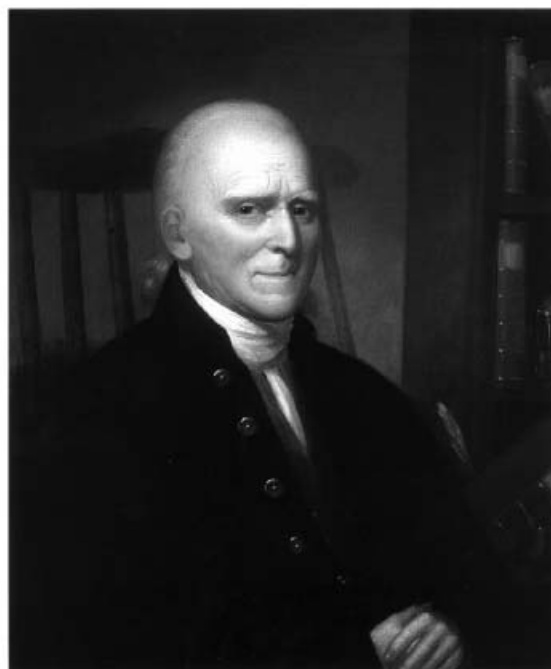
[May] 24th M^{rs}. Allen To Inoculate her Ch^d. With Med. Attend &c.

Ja^s. Champnis to Inoculate his ch^d. with Med. and Attend

M^{rs}. M^cConnell To Inoculate her Ch^d. with Med. Attend.

A lone entry in 1784, in Moses junior’s hand, concerning inoculation of Mr. Hook’s child reveals that Bartram’s fee for this procedure was fifteen pounds, far greater than any other charge found in the account book. These entries concerning smallpox inoculation were the only recorded instances of actual attendance in the account book. Attendance on the inoculated patient was required to monitor the progress of the disease and to promote cleanliness and hygiene.

Inoculation for smallpox became established in England and in North America in the early part of the eighteenth century.¹² First practiced in Boston with a substantial reduction in mortality from smallpox, its use spread to the other British colonies as it became evident that smallpox produced by inoculation was a much milder form of the disease than that acquired naturally. By the final quarter of the eighteenth century inoculation, as endorsed by Doctor John Morgan, consisted of the insertion into a small incision of a small amount of matter taken from a fresh pock of a patient with smallpox. Systemic symptoms were treated with a light diet and very mild doses of purgatives and emetics. By the



Moses Bartram, ca. 1790-1809, in an unsigned portrait thought to be by Charles Willson Peale. (Photo courtesy of Schwarz Gallery).

end of the eighteenth century inoculation was relatively safe and had a profound impact on mortality from smallpox. The publication of Edward Jenner’s discovery that immunity to smallpox was conferred by vaccination with cowpox appeared in 1798 in England. By the early years of the nineteenth century vaccination had supplanted inoculation as a safer and simpler method for the prevention of smallpox.

Moses senior also jotted down some personal expenses. An entry for a new outfit is dated September 16, 1786:

	[shillings]	[pence]
Stockings, thread 1 pair	4	6
Sundries		6
Cravat	6	6
Black Cloth 3/4 yds @ 7/	5	3
Sundries for Jacket & Breeches	13	1
1 1/3 doz. Jacket Buttons	1	
Sundries		1

The account book contains a record of a family real estate transaction between Moses senior and his oldest son, recorded in Moses senior’s hand:

Rec^d. Oct^r. 13th 1786 of Moses Bartram the sum of twenty Dollars for 1000 Acres Land to him which land I do hereby assign all my right, title, claim, Interest & property unto the aforesaid Moses Bartram
Thomas S. Bartram

One wonders why this important record was recorded in a small account book used for random business notes.

Moses Bartram senior led a busy and distinguished life in addition to his career as an apothecary. He was an active member of the American Philosophical Society, and he retained a lifelong interest in natural science, particularly the study of insects. He



“Moses Bartram senior led a busy and distinguished life. He was an active member of the American Philosophical Society, and he retained a lifelong interest in natural science....”

gave his wholehearted support to the American Revolution and served in the militia. For this warlike activity he and like-minded Quaker colleagues, including his brothers James and John, were disowned by the Society of Friends. Their exclusion led them to form the Society of Free Quakers. Moses Bartram played a significant part in the organization of the Free Quakers, and in the construction of their Meeting House at Fifth and Arch. After the Revolution he settled back into his life as an apothecary and distinguished citizen until his death in 1809. The notes in the account book date from this post revolutionary time.

Moses Bartram junior, the third child and second living son of Moses and Elizabeth Budd Bartram's thirteen children, was born December 22, 1768. In 1778 at the age of nine he found, or was given, a 1773 edition of Aitken's *General American Register*. His entries into this account book later used by his father are easily identified by his elegant penmanship. On the first page appears the following inscription in his meticulous and flowing school-boy hand:

**Moses Bartram
His Book
ADomini 1778**

The Invitation.~

*To my best my friends are free,
Free with that and free with me,
Free to pass the comic joke,
Or the tube sedately smoke,
Free to drink just what they please
As at home, and at their ease
Free to speak, as free to think
No informers with me drink
Free to stay a Night or so
When uneasy free to go.*

Scattered through the pages of the book amid his father's pharmaceutical records are some of his personal notes. He commented on the bitter winter of 1784:

1784 Feb^y. 29 The weather was so intensely cold as to freeze a glass of Brandy solid.

1784 March 1st The river Delaware continued frozen strong enough to bear a Sleigh to cross it.

1784 March 15, This Day, the greatest inundation that had been known for above forty years, happened; which added one more affliction to the many which the inhabitants experienced from the severity of the winter. The water in Schuylkill rose ten feet, perpendicular height, more than usual.

He listed in Latin the books which constituted his library—“*Catalogus omnium librorum Moses Bartram...*” The seven books listed with their cost are Corderius's dialogues, a copy of the New Testament, Thomas Ruddiman's Latin grammar, Sallust's, histories, Ovid's *Metamorphoses*, Caesar's *Gallic Wars*, and an edition of Peter Davy's Latin examples.

In an entry ranging from March 1st to the 13th, 1784 Moses junior wrote down in expert pharmaceutical shorthand the medicines his father gave him for an illness which seemed to require a fairly strong purge: “*Catal. Med. quas Pat. meus mihi dat.*”

The list consists of Flowers of sulfur, Cream of tartar, Jalap, an electuary for hemorrhoids, Turner's cerate, calomel, and corrosive sublimate.¹³

A note in Moses junior's hand dated March 31 is an important one. “*Began this day 1785 to go to the University.*” The addition of a medical curriculum to the College of Philadelphia in 1765 had led eventually to its official designation as a university in 1779. On March 31, 1785, therefore, Moses junior began his medical studies. It is not surprising that he sought a career in medicine. His uncle, Dr. Benjamin Say (1755-1813), son of the elder Thomas Say, Moses senior's mentor, was one of Philadelphia's most distinguished physicians.¹⁴

Moses junior was a gifted and precocious student who entered the College of Philadelphia before his eleventh birthday. After a rigorous three-year course of study during which he studied Latin and Greek, mathematics, physics, astronomy, chemistry, botany, zoology, logic, ethics, metaphysics, and oratory, he received his Bachelor of Arts degree in 1782. He was thirteen, an astonishingly young age even at that period when it was not unusual for a young man to receive a bachelor's degree at sixteen. After an interval of three years the possessor of a bachelor's degree could apply for the degree of Master of Arts with no particular academic requirements in the interim. Moses junior received his Master of Arts degree in 1785. The majority of his pharmaceutical entries in the account book are dated from 1782 to 1785 so we may assume that he helped out in his father's shop during this interval. He probably also began his medical studies informally during this period. For in 1786, after only one year at the University, he was awarded the degree of Bachelor of Medicine at the age of seventeen. The requirements included attendance at lectures in anatomy, botany, chemistry, *materia medica*, and theory and practice of physic. In addition the candidate had to serve an apprenticeship to a reputable physician, attend patients in the Pennsylvania Hospital for one year, and pass a private and a public examination.¹⁵ After three more years of clinical study, Moses junior presented to the faculty a thesis in Latin on nutrition dedicated to his uncle, Benjamin Say.¹⁶ He was awarded the degree of Doctor of Medicine in 1790 at the age of twenty-one.

The young doctor moved to Charleston, South Carolina where he set up practice in St. Paul's Parish. A letter to Doctor Benjamin Rush reveals that Doctor Moses Bartram was a compassionate and conscientious physician who was willing to learn.¹⁷ He asked for Doctor Rush's comments on some of his more interesting cases. In one instance his retentive memory and knowledge of botany helped save the life of a critically ill delirious three-year-old child. The symptoms reminded him of those he had once seen following ingestion of the seeds of a thorn-apple or Jimsonweed (*Datura stramonium*). Although the parents denied that their daughter could have eaten such seeds, Doctor Bartram quickly passed a tube into her stomach and

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Dr. Moses Bartram, Jr. This anonymous miniature descended through Moses Bartram's line of the Bartram family. (John Bartram Association).

administered a powerful dose of tartar emetic. The inevitable emesis yielded the seeds and produced a complete recovery.

Moses junior also found time for botanic researches while in South Carolina. He wrote his uncle William Bartram, September 11, 1791 that he had “never in the whole course of my Botanic excursions examined so many plants as since I have been here.” Moses noted “shrubs by the name of Bartram” in many of the gardens of Charleston. “On inquiry I was told they were called so from Grandfather who brought them from Florida.”¹⁸ This shrub, known then by the common name “Bartram” or “Johnny Bartram,” is *Lycium carolinianum* or Christmas Berry.

After only a year of medical practice, however, the life of this gifted young man ended. On November 8, 1791 he died of “a fever prevalent in the rice marshes.”

Two years after the death of Moses Bartram junior, Moses senior endured the loss of two more of his sons. Benjamin drowned during a summer swim in the Schuylkill, and Robert succumbed to the yellow fever which ravaged Philadelphia in the epidemic of 1793. Moses senior had already lost his first son who was stillborn, and a toddler, Joseph, who died in 1781 at the age of twenty months. Thomas Say Bartram and Archibald Bartram, a successful printer, predeceased their father as young adults. One of his two surviving sons, George Washington Bartram, carried on the business.

Two weeks after the death of Moses Bartram senior from apoplexy in December 1809, the following advertisement appeared in the Philadelphia *Aurora* on January 10, 1810.

DRUGS AND MEDICINES.

The public are respectfully informed that the
Old Established Stand,
No. 58 N SECOND STREET
CONDUCTED AS A
DRUG, CHEMICAL, & MEDICAL STORE,
For above forty years by Moses Bartram,
lately deceased,

Is now occupied by his son

GEORGE W. BARTRAM,

WHO pledges himself to the public, that he will use his best endeavors to maintain the reputation it has obtained, and assures them, that at all times they may be supplied with any articles belonging to the above line of business. As a general and complete assortment of every thing appertaining to the business may be had of him, it is deemed needless to insert a list of Medicines.

The Physicians, Surgeons, & c. may rely upon their orders and prescriptions receiving the most accurate attention.

Also—A constant supply of Bartram's famous EMPLASTRUM ADHOESICUM prepared as usual.

Country Physicians, Druggists and Storekeepers orders will be strictly and punctually attended to.

To be had as usual, and only by him,

Bartram's COUGH SYRUP,

HIVE CORDIAL,

HOOPING COUGH DROPS,

WORM TEA,

And the unparalleled SAY'S BALSAM,

Also—BREAST PLAISTER for gathered breasts in Women

N. B. An Apprentice to the above business is wanted.

Reliability, quality, and service, the foundations for a successful business, would continue at the establishment near Mulberry Street.

Notes:

¹ Robert Aitken, *Aitken's General American Register, and the Gentleman's and Tradesman's Complete Annual Account Book, and Calendar, for the Pocket or Desk; for the year of our Lord, 1773*. Printed by Joseph Cruikshank, for R. Aitken, bookseller, Philadelphia: [1772]. I am most grateful to Joel T. Fry, Curator, Historic Bartram's Garden for his gracious help in providing material and information on the Bartram family.

² The handwritings were identified from letters: “Moses Bartram Sr., Philadelphia to William Bartram, July 9, 1772,” Simon Gratz Collection, Historical Society of Pennsylvania; “Moses Bartram Jr. to William Bartram., undated [ca. 1784],” Historical Collections, College of Physicians of Philadelphia. One of Moses Bartram's receipt books, from a private collection, is available on microfilm at the American Philosophical Society.

³ For details of the life of Moses Bartram Sr. and his brother Isaac see Whitfield J. Bell Jr., *Patriot Improvers: Bibliographical Sketches of Members of the American Philosophical Society*, Memoirs of the American Philosophical Society, vol. 226, Philadelphia: 1997, p. 247-251, 280-285; Randolph Shipley Klein, “Moses Bartram (1732-1809),” *Quaker History* 57 (1968), p. 28-34.

⁴ See George W. Corner, *Two Centuries of Medicine: A History of the School of Medicine University of Pennsylvania*. J. B. Lippincott, Philadelphia: 1965, p. 21-22.

⁵ A photocopy of the will of Moses Bartram Sr. is in the Dr. John B. Bartram Special Collections Library and Archives at Historic Bartram's Gardens.

⁶ Evan Tyson Ellis, *The Story of a Very Old Philadelphia Drug Store*. Philadelphia: 1903, pamphlet in the Historical Collections of The College of Physicians of Philadelphia.

⁷ Verdigris (copper acetate).

⁸ Litharge (White Lead).

⁹ Sagapenum (gum resin of sagapen).

¹⁰ Jalap.

¹¹ Seeds of anise.

¹² For a discussion of smallpox inoculation see J. Worth Estes, *Hall Jackson and the Purple Foxglove: Medical Practice and Research in Revolutionary America 1760-1820*. University Press of New England, Hanover, New Hampshire: 1979, p. 20-31.

¹³ See the **Appendix** for a description of the uses of these medications.

¹⁴ Dr. Benjamin Say was the half-brother of Moses' wife, Elizabeth Budd. He was also connected to the Bartram family by marriage. In 1776 he married Ann Bartram Bonsall, a granddaughter of John Bartram, and Moses Bartram Sr.'s niece.

¹⁵ For a description of the early history of the University of Pennsylvania and its medical school see Edward Potts Cheyney, *History of the University of Pennsylvania: 1740-1940*. University of Pennsylvania Press, Philadelphia: 1940, p. 71-104; and Corner, *Two Centuries of Medicine*, p. 20-42.

¹⁶ Moses Bartram Jr., *Exercitatio medica inauguralis, De Victu....* Thomas Lang, Philadelphia: 1790. Historical Collection of the College of Physicians of Philadelphia.

¹⁷ Moses Bartram Jr., "Medical Facts and Observations extracted from a letter from Moses Bartram MD of St. Paul's Parish, South Carolina, to Benjamin Rush MD," *Transactions of the College of Physicians*, vol. 1, part 1, (1793), p. 195-204.

¹⁸ "Moses Bartram, Jr., St. Paul's Parish, SC, to William Bartram, Botanist, Kingsessing, September 11, 1791," Bartram Papers, MS Dept., New York Historical Society.

Appendix:

Drugs Dispensed from Moses Bartram's Apothecary Shop: 1783-1788

Transcribed from notes by Moses Bartram, Sr. and Moses Bartram, Jr.

Alum

Potassium aluminum sulfate. Used topically and internally to contract the tissues and relieve spasms.

Antivenereal injection

A solution to be injected into the urethra for gonorrhea. Zinc sulfate and rose water were common components.

Aq Rosar

Rose water. A flavoring.

Aq veqt

A solution of water, potassium carbonate, calcium carbonate, calcium oxide, and sulfuric acid. A powerful diuretic used to break up kidney or bladder stones.

Aqua fortis

Nitric acid. Used as tonic, antiseptic, to reduce fevers, and as an antisyphilitic.

Aqua Phagedon

Phagedonic water, an aqueous solution of calomel for skin inflammations, ulcers, and chancres.

Balsam copaic

Juice of *Copaifera balsamum*. Used as a tonic for the nervous system, a cathartic, for coughs, as a diuretic, and in venereal disease.

Balsam of Peru

Extract of *Myroxylon pereirae*. Used as tonic, expectorant, to bring on menses, and to aid in wound healing.

Basilicon ointment

A soothing emollient ointment made with Canadian balsam, lard, yellow beeswax, and olive oil.

Calomel

Mercurous chloride. Widely used as cathartic, emetic, diuretic, and for worms and venereal disease.

Cantharis

"Spanish flies," A powder made from the European blister beetle, *Lytta vesicatoria*. Usually applied externally as a blistering paste.

Cascarilla

Bark of *Croton eleutheria*, used as astringent, tonic, and as substitute for cinchona (quinine).

Cerat Turner

See **Turner's cerate**.

Chalybeate

A tonic containing iron.

Chalybis sal

Ferrous sulfate.

Cinchona Peru

Powdered bark of *Cinchona officinalis* later known as quinine. Used especially for intermittent fevers.

Cinnabar

Red mercuric sulfide. Used to produce saliva, sweating, and as an antiepileptic.

Cort Peru Huxham

Huxham's Peruvian bark. Powdered bark from *Cinchona officinalis*. See **Cinchona Peru**. Huxham's Tincture was a combination of cinchona and orange peel, cochineal, and crocus primarily used to "warm and strengthen the stomach." Bartram's notation does not indicate whether the tincture or just powdered bark was dispensed.

Cream of tartar

Powdered potassium bitartrate. Used as a mild cathartic. Often combined with other cathartics.

Decoction salv paul

An extract made from sage leaves (*Salvia officinalis*) boiled in water. Used as a tonic and appetite stimulant.

Decoction lobelia

An extract made from boiling leaves of Indian tobacco (*Lobelia inflata*) in water. It was a powerful emetic.

Elect ante Haemorr

An electuary designed to soothe hemorrhoids. Astringents and mucilaginous plants such as marshmallow root, *Althea officinalis*, were sometimes used.

Elect lenitiv

Lenitive electuary. A mild cathartic given in the form of an electuary.

Elixir antivenerum

An oral remedy for venereal disease consisting of an alcoholic solution of a compound containing mercury such as calomel.

Elixir asthma

Tinctura opii camphorata. An alcoholic extract of opium, camphor, benzoin, and anise. Similar to paregoric.

Elixir of Vitriol

A mixture of sulfuric acid, cinnamon, and ginger in wine. Used as a tonic.

Emp diachylon

A plaster made with white lead (lead monoxide) and olive oil. Used to protect broken skin.

Empl ther sed cum Ol menth

Plaster of theriac (an opium preparation) made up with peppermint oil used for wrapping a painful spot.

Extract Saturn

Lead acetate. Used as an external dressing.

Flor Sulph

Flowers of sulfur (sublimated sulfur). A cooling cathartic. Also used to bring on sweating.

Glauber's salts

Glauber's salts consisted of sodium sulfate. It was a common cathartic which was also commonly used to treat horses.

Gum arab

Gum arabic, extract of *Acacia senegal*. Used as a soothing medicine and sedative and as a medium for electuaries and troches.

Gum opii

Opium incorporated into a gum, such as gum arabic.

Gum Sagapenum

Gum resin of sagapen (probably *Ferula persica*). Used as a stimulant, an antispasmodic, to bring on the menses, a weak cathartic, and expectorant.

Inj ex decoct lem linc

Unidentified.

Inj up

Unidentified.

Ipecac

Root of *Cephaelis ipecacuanha*. An emetic still in use.

Linamentum opiatum

A topical analgesic composed of opium, camphor, wine, oil of rosemary, and soap.

Liq Guaic

Tincture of guaiac, the resin and wood from *lignum vitae*, *Guaiacum officinale*. Guaiac was used in the form of a tincture, pills, or emulsion for catharsis, to promote sweating, diuresis, and as an antivenereal.

Liq laudanum

Tincture *thebaica*. A concentrated form of opium in alcohol.

Lotus peruv myrr refrig

Unidentified.

Magnes alb

Magnesium carbonate, a strong antacid and cathartic. Also believed to prevent or destroy kidney or bladder stones.

Mixt test cer

A powdered mixture of cerate (beeswax) and pulverized oyster shells used as an antacid.

Nux Mosch

Nux moschata mare, nutmeg. Used as a tonic, narcotic, antiemetic, and to stimulate digestion.

Ol amygdal

Oil of bitter almonds, less often oil of sweet almonds. Taken internally it was considered a sedative, externally an emollient and a muscle relaxant.

Ol antiscorb refrig

Unidentified.

Paregoric

An alcoholic solution of 0.2% opium combined with benzoin, camphor, glycyrrhiza, oil of anise and honey. Used until recently as a narcotic, for diarrhea, and for severe coughs.

Pil φ

Cipher used by Bartram for pills of corrosive sublimate, mercuric chloride, a powerful antivenereal drug.

Pil aloes (cum guaiacum)

A pill of aloes and guaiac prescribed to bring on a sweat.

Pil anodyne

A pill prescribed to mitigate pain. Opium in some form would have been a component.

Pil antichol

Unidentified.

Pil Polychrist

Pill of polychrestum, usually potassium sulfate or magnesium carbonate. It was used as a cathartic.

Pomat Saturn

See **Saturnine ointment**.

Poudre de Chartreux

Chartreux powder. A preparation of sulfured antimony used as an emetic and a cathartic.

Pul mosc

Powder of musk. Used as a sedative for "nervous fever" and for any condition with "spasms" such as typhus with delirium, typhoid, epilepsy, whooping cough.

Pulv ante diarrhea

A powder to alleviate symptoms of diarrhea. It probably contained opium.

Pulv camphor

Camphor powder, an extract from *Cinnamomum camphora*. Used as a narcotic and analgesic, to combat inflammations as a tonic and soporific, and to help swollen joints. Also dispensed as a pill.

Pulv. cath

A cathartic powder. A mixture of calomel and jalap was a common formula.

Pulv chankry

Unidentified.

Pulv emet

A powder used to produce vomiting. Tartar emetic (antimony potassium tartrate) was a common component.

Pulv feb

Fever powders of Bartram's own composition. Used to reduce fevers. Probably consisted of an emetic and a cathartic such as tartar emetic and Glauber's salts.

Pulv Jallap

Jalap, powdered root of *Exogonium purga*. Widely used as cathartic, diuretic, and vermifuge.

Pulv nitre

Powder of nitre. Usually saltpeter (potassium nitrate or sodium nitrate) used to cool the blood, to produce diuresis, sweating, and as a mild cathartic.

Pulv nitro camphor

Unidentified.

Pulv refrig

Cooling powder. Used to combat fever and inflammation. A typical cooling powder consisted of Glauber's salts (sodium sulfate), nitre, and tartar emetic.

Pulv Rhai

Powdered Rhei, rhubarb root, *Rheum officinalis*. Used as a cathartic, astringent, and tonic.

Rad columba

Powdered root of *Swertia carolinensis*. Used as a mild tonic, antiseptic, or anti-emetic.

Rad sarsa

See **Sarsaparilla**.

Rad Valerian

Root of *Valeriana officinalis*. A mild sedative.

Refrigerant ointment

A soothing ointment for external inflammations. A common emollient was composed of palm oil, olive oil, yellow wax, and Venice turpentine.

Sal cath amar

Bitter cathartic salt, magnesium sulfate, also known as Epsom salts. Used for catharsis and to promote sweating.

Sal Glauber

See **Glauber's salts**.

Saline julep

A selection of compounds such as tartar salt (potassium tartrate) and lemon juice in a solution of water and simple syrup. Used to produce sweating and diuresis.

Sap castel

Castile soap.

Sarsaparilla

Powdered root of *Smilax aristolochiaefolia*. Used for flavoring, as a mild tonic, to induce sweating, or for venereal disease.

Sassafras

Sassafras albidum. Used as tonic, cathartic, and diuretic, and for sweating, joint pains, and venereal disease.

Saturnine cerate

Saturnine ointment: olive oil, white wax, and lead acetate. Used externally as a cooling and astringent ointment for skin irritations.

Sem Douce man Lin

Unidentified.

Syrup balsam

Syrup made of the oil of the Canada balsam, *Abies balsamea*. Considered a tonic, cathartic, and diuretic.

Syrup menthol

Syrup of peppermint used as a tonic.

Tartar emetic

Antimony potassium tartrate. Produces sweating and catharsis at low doses and vomiting in higher doses.

Thebaic pill

A pill made of opium, glycyrrhiza (licorice), and soap.

Tinc emet

Emetic tincture. A powder to produce vomiting made up in an alcoholic solution.

Tincture myrrh

An alcoholic solution of myrrh, gum resin extracted from *Commiphora abyssinica*. Used as a tonic, to bring on sweating, as an expectorant, to relieve diarrhea, and to bring on the menses.

Turner's cerate

An ointment made of calamine, yellow beeswax, and olive oil.

Ung haemorr

Ointment for hemorrhoids. One such remedy consisted of palm oil, olive oil, yellow wax, turpentine, laudanum, all mixed with an egg yolk.

Ung lilior alb

Ointment made from the root of the white lily. Used as an emollient or in poultices.

Ung merc

"Blue ointment" consisting of mercury, mutton suet, and hog's lard. Used for syphilitic chancres, and itch, or to get mercury into the body by means of absorption through the skin.

Ung myrrh

An ointment which contained myrrh.

Ung refrig

See **Refrigerant ointment**.

UP

Uvae passae. Currants or raisins used to flavor drug mixtures.

Ursa bubon

Unidentified.

Vermifuge injection

A solution given rectally to rid the body of worms. An oily mixture was often used.

Vin emet

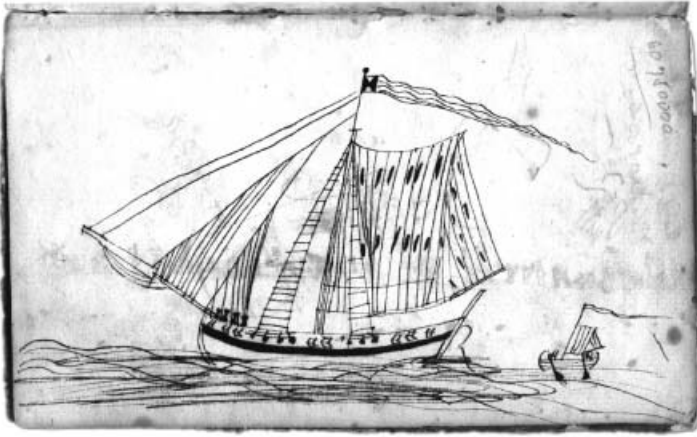
A strained solution of one or more antiemetics in wine.

Vit careal frustulum

Probably vitriolum caeruleum, copper sulfate. Used as astringent to contract the vessels and tonic when taken internally. It was used externally to heal open sores.

Vitriolatum album

Zinc sulfate. Used externally as a styptic.



Several small sketches are scattered through the Bartram copy of Aitken's General American Register. These are probably by Moses junior, but unsigned. This sketch of sailing vessels—probably on the Delaware, is found on the rear endpapers. (John Bartram Association).



This rural landscape sketch is also from the rear endpapers. It includes a farmhouse surrounded by a fenced orchard. A number of figures are at work haying, rowing, and working in the orchard. A windmill is located at the far right. (John Bartram Association).

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Bartram Broadside is edited by Joel T. Fry, Curator, Historic Bartram's Garden. Ideas and contributions on the Bartram connections to history, exploration, horticulture, botany, and other natural sciences are encouraged.

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