Early American Science: A Selective Guide To Materials At The British Library

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Introduction

By the early eighteenth century the American colonies were well established along the eastern seaboard. In many respects, their economic development until this point had been remarkable. So, too, were the advances they had made in self-government. By the 1720s trade between the colonies was increasing; transport links were improving; the postal service was becoming more frequent and reliable and newspapers were circulating more widely. Relative to Europeans, most colonists enjoyed a high standard of living and in many towns the creation of an elite class was well under way.

Regarding their ability to participate in and contribute to the new scientific thinking, however, the colonies were distinctly disadvantaged. They lacked not only the great libraries, universities and endowed institutions of Europe but also the possibility of support from enlightened patrons. Despite this, the ideas of the Enlightenment enthused many throughout the colonies. Great efforts were made to advance science not only in New England, which had been regarded as the cultural capital of the colonies, but also the Southern and Middle colonies, with Philadelphia – home to Benjamin Franklin and birthplace of the American Philosophical Society – taking up this challenge to great effect. Some of the subjects of the colonists' enthusiasm are outlined briefly below; this is then followed by a selective bibliography of their works, all of which are held in the British Library.

Natural phenomena: meteors, earthquakes and the transit of Venus...

Although the colonists contributed comparatively little in the way of original scientific thought, they did provide significant observations and descriptions of natural phenomena. The transit of Venus across the sun in both 1761 and 1769 provided a particularly valuable opportunity. Since the 1761 transit was not observable from within the geographical limits of the settled colonies, Professor John Winthrop, Hollis Professor of Mathematics and Natural Philosophy at Harvard, travelled with two students and Harvard's best apparatus to St John's, Newfoundland. Their observations, together with those made by others in locations across the globe, expanded existing knowledge about the dimensions of the solar system. Eight years later, the 1769 transit could be observed throughout the colonies. In Philadelphia, under the leadership of the astronomer and surveyor David Rittenhouse, the American Philosophical Society erected three observation platforms, one of which – outside the Pennsylvania State House – was later used for the first public reading of the Declaration of Independence. Scientific observations were also made in Rhode Island, Massachusetts, Delaware and New Jersey.

The observation of earthquakes, comets and meteors also provided colonists with an opportunity to contribute to the wider scientific community and here, too, John Winthrop played a major role. Up until the early eighteenth century, earthquakes were invariably regarded as acts of God; indeed, nearly all of the responses to the New England earthquake in 1727 were sermons. By the time of the Lisbon and New England earthquakes in 1755 this was beginning to change. For example, although Thomas Prince immediately chose to reprint his 1727 sermon, *Earthquakes the Works of God and Tokens of his Just Displeasure*, he added an appendix suggesting a secondary cause of the earthquake to be the numerous lightning rods throughout the city of Boston. John Winthrop then publicly countered this proposition with the

publication of his own insights about this event, first given in lecture to his Harvard students. He notably described the shocks as a 'kind of undulatory motion' or a 'wave of earth' and decried Prince's lightning rod thesis as proof of the contemporary fashion for citing "electricity" as an explanation for everything. In the subsequent newspaper debate between the two men, Winthrop was said by Jared Eliot to have 'laid Mr Prince flat on [his] back.'

Disease and inoculation

Not surprisingly, the cause, prevention and cure of a wide variety of diseases were the focus of many scientific tracts published in the colonies and during the early years of the Republic. In particular, the smallpox epidemic in Boston in 1721 and the yellow fever epidemic in Philadelphia in 1793 garnered much attention.

Smallpox outbreaks occurred in the colonies throughout the seventeenth and eighteenth century; indeed, it was the introduction of smallpox by Europeans in the sixteenth century that decimated the indigenous population. By the early 1700s it was widely known that survivors of smallpox were immune to later occurrences of the disease. Variolation, a type of inoculation, was practised in many countries and reports of such practices appeared in the Royal Society's *Philosophical Transactions* in the 1710s.

During the 1721 epidemic in Boston, in which more than 800 people eventually died, a passionate debate about inoculation took place. Supporting the practice was the Reverend Cotton Mather, whose wife and three children had died in a measles epidemic. Years earlier, Mather's slave had told him how he had been inoculated as a child in Africa. Mather later read about smallpox inoculation in the *Transactions*. Following the outbreak of the disease in 1721, he inoculated his own son and, together with Dr Zabdiel Boylston, urged physicians in Boston to inoculate as many people as possible. Yet most of the city's doctors, together with much of the population, believed instead that inoculation would only hasten the spread of the disease. Many regarded smallpox as part of God's will and some argued that since inoculation originated in Africa, Asia and the Middle East it was a heathen practice unsuitable for Christians.

The first major American yellow fever epidemic occurred in July 1793 in Philadelphia – then capital of the United States – and also prompted much enquiry. Although yellow fever is now known to be spread by infected mosquitoes, at the end of the eighteenth century it was generally believed that it was a contagious disease that originated amidst putrefying matter. Within the first month of the outbreak, one tenth of city's residents had died and thousands soon fled to the countryside for safety, including President George Washington and most national and state officials.

In the absence of political leadership from the legislature, the mayor's plea for help was answered by several key residents. Together, they created a desperately needed hospital and sanatorium and a system for burying the dead. Although physician Benjamin Rush, signatory to the Declaration of Independence, urged copious bloodletting and purging as a cure for the disease, most doctors disagreed. Indeed, the argument about the most effective treatment would rage for several years as not only Philadelphia, but also Baltimore, New Haven and New York were hit by epidemics. It was not until 1881 that it was first proposed that yellow fever was spread by mosquitoes and in the 1930s two vaccines were developed, one of which is still in use today. The US suffered its last major outbreak of the disease in 1905.

Climate, geography and the environment...

Other scientific topics of particular interest to the colonists included the climate, geography and the natural environment. It soon became apparent to the early settlers that predictions about the North American climate could not be based upon those experienced at the same latitude in Europe: the bitter winters and short growing season of New England, which lay well south of London, were early proof of this. Observations about this unfamiliar weather and the new and challenging environment appeared in the earliest colonial writings. In particular, the authors commented upon their potential impact upon human health and the ability to develop the land. Not surprisingly, such observations continued in the writings of settlers and travellers as the nation continued moved westward throughout the nineteenth century. But in the early/mid eighteenth century the American climate was also being linked by physicians and natural and moral philosophers to the development of civilization itself. Clearing the forests and cultivating the land were regarded as actions that would not only tame the wilderness but also 'civilise' the climate, bringing it ever more in line with that of Europe. Evidence that the climate did actually change significantly during this time is hard to find; yet written records clearly show the colonists' belief that this was so. Through their own labour and efforts, they perceived themselves to be carving out of the wilderness an environment and a climate quite different to the one that had existed pre-contact. They interpreted differences as encouraging signs of progress, permanence and the potential to thrive.

Note on the Bibliography: Please note that in the bibliography that follows, the shelfmark for each item is given in parentheses. For most authors, birth and death dates are provided; however, in some cases these have not been traced. The contributions of those living in the American colonies to the Royal Society's *Philosophical Transactions* are not included in this bibliography but can be consulted in the British Library Reading Rooms.

EARLY AMERICAN SCIENCE: BIBLIOGRAPHY

Academy of Medicine, Philadelphia

Proofs of the origin of the yellow fever, in Philadelphia & Kensington in ... 1797 from domestic exhalation etc., in two letters, etc. Philadelphia, 1798. (T.96.(4))

Samuel Bard, 1742-1821

A compendium of the theory and practice of midwifery...illustrated by many cases, and particularly adapted to the use of students. Fifth edition, enlarged. New York: Collins & Co., 1819. (1609/662)

A discourse on the importance of medical education: delivered ... at the opening of the present session of the Medical School of the College of Physicians and Surgeons. New York: C.S. van Winkle, 1812. (D-7679.aaa.8).

A discourse on medical education, delivered at the medical commencement of the College of Physicians and Surgeons of the University of the state of New York, on the sixth of April, 1819. New York: C.S. van Winkle, 1819. (MFR-3019 *10651* Reel 32:3 DSC)

Two discourses dealing with medical education in early New York. New York: Columbia University Press, 1921. (7679.bb.48)

A discourse upon the duties of a physician: with some sentiments, on the usefulness and necessity of a public hospital: delivered before the president and governors at King's College, at the commencement, held on the 16th of May, 1769. As advice to those gentlemen who then received the first medical degrees conferred by that university. New York: A. & J. Robertson, 1769. (MFR-3019 *10643* Reel 32:2 DSC); (Bedford, Mass.: Applewood Books, 1996. (YA.1997.a.15569))

A domestic narrative of the life of S. Bard, M.D. By John McVickar. New York, 1822. (551.d.11)

An enquiry in to the nature, cause and cure of the angina suffocativa, or, sore throat distemper, as it is commonly called by the inhabitants of this city and colony. New York: S. Inslee, and A. Car, 1771. (C.184.a.12)

A guide for young shepherds: or, facts and observations on the character and value of merino sheep: with rules and precepts for their management, and the treatment of their diseases, as well as of sheep in general. Collected from the latest and best writers on these subjects, and confirmed by the experience of the author and his friends. New York: Collins, 1811. (MFR-3010 *10646* Reel 8:8 DSC)

Tentamen medicum inaugurale de viribus opii, etc. Edinburgi: A. Donaldson & J. Reid, 1765. (T.364.(8))

Benjamin Smith Barton, 1766-1815

Collections for an essay towards a material medica of the United States, etc. Philadelphia: the author, 1798. (B.89.(1)); (T.450.(1)).

Additional facts, observations and conjectures relative to the generation of the opossum of North America. In a letter to Professor J.A.H. Reimarus of Hamburgh. Philadelphia: S. Merritt, 1813. (B.326.(11))

Archaeologiae Americanae telluris collectanea et specimina. Or, collections with specimens for a series of memoirs on certain extinct animals and vegetables of North America. Together with facts and conjectures relative to the ancient condition of the lands and waters of the continent. Philadelphia: the author, 1814. (7203.c.5)

Elements of botany: or outlines of the natural history of vegetables. London: J. Johnson, 1804. (7028.w.28); Philadelphia: R. Desilver, 1827. (MFR-3019 *9750* Reel 8:6 DSC)

Flora virginica sive plantarum praecipue indiginarum. Philadelphiae: D. Heartt, 1812. (MRF-3019 *13929* Reel 8:7 DSC)

Fragments of the natural history of Pennsylvania. Philadelphia: Way & Groff, 1799. (444.i.15.(I)); (B.265.(8))

A memoir concerning the disease of goitre, as it prevails in different parts of North-America. Philadelphia: the author, 1800. (T.96.(1))

A memoir concerning the fascinating faculty which has been ascribed to the rattle snake, and other American serpents. Philadelphia: the author, 1796. (39.b.3); (B.323.(3)); (T.174.(5))

Supplement to a memoir concerning the fascinating faculty which has been ascribed to the rattle snake and other American serpents. In a letter to Professor [E.A.H. von] Z[immermann]. Philadelphia, 1800. (B.323.(4)); (T.133.(6)).

New views of the origin of the tribes and nations of America. Philadelphia: the author, 1797. (G.15767); (12903.e.3); Philadelphia: The Author, 1798. (1061.d.8); (981.e.18).

Observations on some parts of natural history, to which is prefixed an account of several remarkable vestiges of an ancient date, which have been discovered in different parts of North America. London: the author, 1787. (B.321.(3)); (T.248.(1)); London: C. Dilly, 1787. (MFR-3009 *7072* Reel 2:6 DSC)

----- and Winthrop Sargent. Papers relative to certain American antiquities. Philadelphia, 1796. (B.282.(5))

The Philadelphia Medical and Physical Journal. Collected and arranged by B.S. Barton. Vol. 1, Vol. 2, Vol. 3, pt. 1. Philadelphia. (P.P.2894.f.)

John Bartram, 1699-1777

A journal kept upon a journey from St Augustine up the river St John's, etc. In Stork, W., An account of East Florida... London: W. Nicoll, [1767]. (10411.bb.29); Third edition, much enlarged and improved. [In W. Stork, A description of East Florida...] London: Sold by W. Nicoll, 1769. (MFR-3017 *1* Reel 38: 10)

Observations on the inhabitants, climate, soil, rivers, productions, animals, and other matters worthy of notice. Made by Mr John Bartram in his travels from Pennsylvania to Onondago, Oswego, and the lake, Ontario, in Canada. To which is annexed a curious account of the cataracts at Niagara by Mr Peter Kahm, a Swedish gentleman who travelled there. London: Whiston and White, 1751. (1061.g.36); (980.g.27); (145.a.10); (W67/0041 DSC); [Another edition] Geneva, NY: W.F. Humphrey, 1895. (10413.h.38).

A journey from Pennsylvania to Onondaga in 1743. Barre, Mass.: Imprint Society, 1973. (75/25737)

Diary of a journey through the Carolinas, Georgia and Florida from July 1, 1765, to April 10, 1766. Annotated by Francis Harper. Philadelphia, 1942. (Ac.1830/3)

The correspondence of John Bartram, 1734-1777. Edmund Berkeley and Dorothy Smith Berkeley, eds. Gainesville: University Press of Florida, 1992. (YD.2004.a.1497)

William Bartram, 1739-1823

Travels through North and South Carolina, Georgia, East and West Florida, the Cherokee country, the extensive territories of the Muscogulges, or Creek confederacy, and the country of the Chactaws: containing an account of the soil and natural productions of those regions, together with observations of the manners of the Indians. Embellished with copper plates. Philadelphia: James & Johnson, 1791. (980.l.27); London: J. Johnson, 1792. (279.i.21); Dublin: J. Moore, 1793. (1603/198); Berlin, 1793. (RB.23.a.1404); London: J. Johnson, 1794. (G.2781).

Voyage dans les parties sud l'Amerique septentrionale. Paris, [1799]. (1052.c.21)

Botanical and zoological drawings, 1756-1788: reproduced from the Fethergill album in the British Museum. Philadelphia: American Philosophical Society, 1968. (5577.100000 vol 74 DSC)

Jeremy Belknap, 1744-1798

The history of New Hampshire, containing a geographical description of the state. 3 vols. Philadelphia; Boston: The author, 1784-92. (278.f.7); (278.f.8)

Board of Overseers of the Poor, Boston

An account of the small-pox and inoculation, at Boston in New-England, in the year 1752. In I. Maddox. A sermon preached before his Grace Charles Duke of Marlborough. [1752]. (694.g.7.(6))

William Brattle, c.1662-1717

Compendum logica secundum principia: D. Renati cartesii plerumque efformatum et catechistice propositum. Bostoni: Excusum, 1735. (MFR-3008 *3137* Reel 4:2 DSC)

An ephemeris of coelestial motions, aspects, eclipses, etc. For the year of the Christian era 1682. Cambridge [Mass.]: S. Green, 1682. (MFR-3009 *1* Reel 16:19 DSC)

A sermon at the lecture in Boston after the funerals of those excellent & learned divines... the Rev. Mr William Brattle, and the Rev. Mr Ebenezer Pemberton. Boston: Samuel Gerrish & Daniel Henchman, 1717. (1416.a.11)

Thomas Bond, 1712-1784

Défense de l'inoculation, et relation des progrès qu'elle a faits à Philadelphie en 1758. Strasbourg, 1784. (1174.f.12)

Zabdiel Boylston, 1680-1766

An historical account of the small-pox inoculated in New England, upon all sorts of persons, whites, blacks and of all ages and constitutions. London: S. Chandler, 1726. [Two copies.] (T.80.(2)); (1166.h.9.(7))

William Byrd, 1674-1744

History of the dividing line and other tracts. [viz. "A journey to the land of Eden," "A progress to the mines," "The proceedings of the Commissioners appointed to lay out the bounds of the Northern Neck," "An essay on bulk tobacco," "Miscellaneous papers,"] From the papers of W. Byrd. Richmond, 1866. 2 vols. (10410.bbb.3); (10410.f.30)

The Westover manuscripts: containing the history of the dividing line betwixt Virginia and North Carolina; A journey to the land of Eden, A.D. 1733; and A progress to the mines. Written from 1728 to 1736, and now first published. Petersburg, Va.: E. & J.C. Ruffin, 1841. (1431.k.7)

The secret diary of William Byrd of Westover, 1709-1712. Eds. Louis B. Wright and Marion Tinling. Richmond, Va.: Dietz Press, 1941. (10887.h.24)

Thomas Cadwalader, 1707-1779

An essay on the West-India dry-gripes. Philadelphia: B. Franklin, 1745. (T.61.(2))

Mathew Carey, 1760-1839

A short account of the malignant fever, lately prevalent in Philadelphia: with a statement of the proceedings that took place on the subject in different parts of the United States. Philadelphia: Printed by the author, 1793. (T.98.(7)) [And other editions].

Mark Catesby, 1676?-1749

Hortus Britanno-Americanus: or, curious collection of trees and shrubs, the produce of the British colonies in North America; adapted to the soil and climate of England. London: printed by W. Richardson and S. Clark for J. Ryall, 1763. (MFR-3019 *1* Reel 9:3 DSC)

Hortus Europae Americanus: or, a collection of 85 curious trees and shrubs, the produce of North America...Together with observation on their culture. London: J. Millan, 1767. (452.f.14)

The natural history of Carolina, Florida and the Bahama Islands: containing the figures of birds, beasts, fishes, serpents, insects, and plants: particularly the forest-trees, shrubs and other plants, not hitherto described, or very incorrectly figured by authors. Together with their description in English and French. To which, are added observations on the air, soil, and waters: with remarks upon agriculture, grain, pulse, roots, &c. To the whole, is prefixed a new and correct map of the countries treated of. 2 vols. 3 pts. London, 1731-43. (44.k.7)(44.k.8); (687.l.3); (C.113.i.1)

Piscium, serpentum, insectorum aliorumque nonnullorum animalium nec non plantarum...imagines quas Marcus Catesby in posteriore parte splendidi illius operis quo Carolinae, Floridae et Bahamensium insularum tradidit historiam naturalem ... descripsit vivis coloribus pictas edere coeperunt Nicolaus Fredericus Eisenberger et Georgius Lichtensteger et ad finem perduxerunt beati Georgii Wolfgangi Knorrii heredes. (Die Abbildungen verschiedener Fische, Schlangen, etc.) Lat. & Ger. Norimbergae, 1777. (1819.d.3)

Isaac Cathrall, 1764-1819

A medical sketch of the synochus maligna, or malignant contagious fever: as it lately appeared in the city of Philadelphia: to which is added, some account of the morbid appearances observed after death, on dissection. Philadelphia: Thomas Dobson, 1794. (MFR-3019 *1* Reel 29:8 DSC)

Lionel Chalmers, 1715-?

An account of the weather and diseases of South-Carolina. 2 vols. London: E. &. C. Dilly, 1776. (43.c.23)

An essay on fevers; more particularly, those of the common, continued and inflammatory kinds... to which is added, an essay on the crisis of those disorders. London: E. &. C. Dilly, 1768. (T.245.2)); (T.272.(6)); (T.60.(1)).

Thomas Clap, 1703-1767

Conjectures upon the nature and motion of meteors, which are above the atmosphere. Norwich, [Conn.]: John Trumbull, 1781. (8756.bbb.17)

John Clayton, 1694-1773

Flora Virginica exhibens plantas quas v.c. Johannes Clayton in Virginia observavit atque collegit. Lugduni Batavorum: Cornelium Haak, 1739-43. (MFR-3019 *10718* Reel 9:4 DSC); [Another edition] 1762. (35.d.13)

Cadwallader Colden, 1688-1776

An explication of the first causes of action in matter, and of the cause of gravitation. New York: James Parker, 1745. (536.d.25.(2)); [Another edition]. London: J. Brindley, 1746. (117.c.4); [Another edition]. Paris: Pissot, 1751. (RB.23.a.357)

The principles of action in matter, the gravitation of bodies, and the motion of the planets, explained from those principles. London: R. Dodsley, 1751. (8707.f.6)

The Colden letter books. 1760-65; 1765-70. 2 vols. New York, 1877, 78. (Ac.8425/8)

The history of the five Indian nations depending on the province of New York in America. New York: William Brandford, 1727. (C.33.c.36) [Many other editions.]

The letters and papers of Cadwallader Colden. 9 vols. New York, 1918-37. (Ac.8425/8)

The philosophical writings of Cadwallader Colden. Amherst, NY: Humanity Books, 2001. (m02/35948)

College of Physicians of Philadelphia

Facts and observations relative to the nature and origin of the pestilential fever, which prevailed in this city, in 1793, 1797, and 1798. Philadelphia: Thomas Dobson, 1798. (MFR-3019 *1* Reel 29:9 DSC)

Proceedings of the College of Physicians relative to the prevention of the introduction and spreading of contagious diseases. Philadelphia, 1798. (T.328.(1))

Christopher Colles, 1738-1821

Proposals for the speedy settlement of the waste and unappropriated lands of the western frontiers of the state of New York, and for the improvement of the inland navigation between Albany and Oswego. New York: Samuel Loudon, 1785. (MFR-3010 *1* Reel 34:6 DSC)

A survey of the roads of the United States of America. New York, 1789. (Maps.C.22.b.7)

Benjamin Colman, 1673-1747

Some observations on the new method of receiving the small-pox by ingrafting or inoculating. By Mr. Colman. Containing also the reasons, which first induced him to, and have since confirmed in him, his favourable opinion of it. Boston: Samuel Gerrish,

1721. [Two copies]. (1174.h.22.(4)); (1174.d.46.(7)). [Another edition]. London: Emanuel Matthews; Richard Ford, 1722. (1174.h.22.(5))

A narrative of the method and success of inoculating the small-pox in New England. With a reply to the objections made against it in a letter from a minister at Boston [i.e. William Cooper]. To which is now prefixed an historical introduction. Dublin: George Grierson, 1722. (RB.23.a.1378.(1))

Thomas Condie.

History of the pestilence, commonly called yellow fever, which almost desolated Philadelphia, in the months of August, September & October, 1798. Philadelphia: R. Folwell, 1799. (MFR-3019 *1* Reel 29:10 DSC)

William Cooper,

A reply to the religious scruples against inoculating the small-pox, in a letter to a friend. Boston, 1722. (RB.23.a.1378.(2))

William Currie, 1754-1828

A description of the malignant, infectious fever prevailing at present in Philadelphia: with an account of the means to prevent infection, and the remedies and methods of treatment, which have been found most successful. Philadelphia: T. Dobson, 1792. (MFR-3019 *1* Reel 29:11 DSC)

An historical account of climates and diseases in the United States of America; and of the remedies and methods of treatment. Philadelphia: T. Dobson, 1792. (1170.k.29)

An impartial review of that part of Dr Rush's late publication, entitled "An account of the bilious remitting yellow fever as it appeared in the city of Philadelphia in the year 1793 which treats of the origin of the disease": in which his opinion is shewn to be erroneous, the importation of the disease established, and the wholesomeness of the city vindicated. Philadelphia: T. Dobson, 1794. (MFR-3019 *1* Reel 29:12 DSC)

Memoirs of the yellow fever, which prevailed in Philadelphia, and other parts of the United States of America, in the summer and autumn of the present year, 1798...to which is added, a collection of facts respecting the origin of the fever. Philadelphia: Thomas Dobson, 1798. (T.100.(7))

A sketch of the rise and progress of the yellow fever, and of the proceedings of the Board of Health, in Philadelphia, in the year 1799; to which is added, a collection of facts and observations respecting the origin of the yellow fever in this country; and a review of the different modes of treating it. Philadelphia: Budd & Bartram, 1800. (T.100.(6)); (T.96.(6)).

John William Gerar de Brahm, 1717-c.1799

The Atlantic pilot. London, 1772. (7.TAB.99)

Jean Devèze, 1753-1829

An enquiry into, and observations upon the causes and effect of the epidemic disease, which raged in Philadelphia from the month of August till towards the middle of December, 1793. Philadelphia: Parent, 1794. (T.176.(2))

Robert Dossie, 1717-1777

Observations on the pot-ash brought from America ... processes for making pot-ash and barilla, in North America, etc. London, 1767. (117.I.43); (1651/1397); (T.933.(14))

William Douglass, c.1691-1752

The abuses and scandals of some late pamphlets in favour of inoculation of the Small Pox, modestly obviated and inoculation further considered in a letter to A- S-, M.D, & F.R.S. 2 pts. Boston, 1722. (1174.d.46.(15, 18))

A dissertation concerning inoculation of the small pox. Boston: D. Henchman, T. Hancock, 1730. (1174.d.46.(3))

A friendly debate, or a dialogue between Academicus and Sawny and Mundungus, two eminent physicians, about some of their late performances. [A reply to "The Abuses and Scandals of some late pamphlets in favour of inoculation of the small pox" by W. Douglass.] Boston, 1722. (1174.d.46.(16))

Inoculation of the small pox as practised in Boston, considered in a letter to A-S-, M.D., & F.R.S. in London. Boston: J. Franklin, 1722. (1174.d.46.(12))

Letters from Dr. W. D. to Cadwallader Colden of New York. Massachusetts Historical Society. Fourth series. Vol. 2. 1852. (Ac.8400)

A letter to Dr Thomson in answer to the case of the Right Hon. T. Winnington. London, 1746. (1169.h.36.(5)); (117.k.32); (RB.23.a.7485.(3)); Second edition. London, 1746. (1419.k.18).

Physic in danger: being the complain of the Company of Undertakers, against the Doctor T-, C-, and D-. Addressed to the College of Physicians: containing remarks upon the pamphlets lately published by those three gentlemen. London: J. Lowndes, 1746. (1568/1614)

Notes on copy of ... W. Douglass's Almanack for 1743, touching on the subject of medicine in Massachusetts before his time...Reprinted from the collections of the Massachusetts Historical Society. Cambridge, Mass.: J. Wilson and Son, 1884. (7306.cc.13.(4))

A practical essay concerning the small pox. 2 pts. London, 1730. (1173.h.38); (T.358.(11)); (T.360.(1)); T.61.(1)); Another edition. Boston, 1730. (1174.d.46.(21)).

Resp. tentamen in animalium hydraulisin. Praes. P. Burmanno. Trajecti ad Rhenum, 1712. (1185.k.17.(26))

A summary, historical and political, of the first planting, progressive improvements, and present state of the British settlements in North-America: with some transient accounts of the bordering French and Spanish settlements. 2 vols. Boston: Rogers and Fowle, 1747-50. (1197.c.17-19); another edition, London, 1755. (279.i.33); (279.i.34); another edition, London, 1760. (1061.d.18)

Jared Eliot, 1685-1763

Essays upon field-husbandry in New England, as it is or may be ordered. Boston: Edes & Gill, 1760. (1508/1235)

Essays upon field-husbandry in New England, and other papers, 1748-1762. New York: Columbia University Press, 1934. (Ac.2688/36)

Benjamin Franklin, 1706-1790

[N.B.: Readers interested in Benjamin Franklin's scientific work are particularly recommended Joyce E. Chaplin, The first scientific American: Benjamin Franklin and the pursuit of genius. New York: Basic Books, 2006. (YD.2009.a.6792)]

Experiments and observations on electricity made at Philadelphia in America, by Mr Benjamin Franklin, and communicated in several letters to Mr P. Collinson, F.R.S. London: E. Cave, 1751-53. (MFR-3019 *1* Reel 39:4 DSC)

An account of the soil, growing timber, and other productions, of the lands ... in the back parts of ... New York and Pennsylvania ... and particularly the lands in ... Ontario, know by the names of Genesee Tract. (Thoughts on emigration. Remarks. [By B. Franklin] for the information of those who want to become settlers in America.) London, [1791]. (T.53.(10)); (T.53.(9))

Animal magnetism. Report of Dr Franklin and other commissioners charged ... with the examination of the animal magnetism as practised at Paris. 2nd ed. Philadelphia, 1837. (7306.bb.6.(1))

Isaac Greenwood, 1702-45

A friendly debate, or a dialogue between Academicus and Sawny and Mundungus, two eminent physicians, about some of their late performances. [A reply to "The Abuses and Scandals of some late pamphlets in favour of inoculation of the small pox" by W. Douglass.] Boston, 1722. (1174.d.46.(16))

Arithmetick vulgar and decimal: with the application thereof, to a variety of cases in trade, and commerce. Boston: T. Hancock, 1729. (C.109.e.39)

A philosophical discourse concerning the mutability and changes of the material world, read to the students of Harvard College, April 7, 1731, upon the news of the death of T. Hollis. Boston, 1731. (8704.b.9)

[Prospectus on] Explanatory lectures on the orrery, armillary sphere, globes and other machines, instruments and schemes made use of by astronomers. Boston, 1734. (MFR/3019 *1* Reel 7:5 DSC)

Samuel Powel Griffitts, 1759-1826

Biographical memoir of Dr Samuel Powel Griffiths, etc. By Emerson Gouveneur. Philadelphia: J. Harding, 1827. (1570/2919)

Notice of the life of Samuel Powel Griffiths. By Benjamin Horner Coates. In Historical Society of Philadelphia. 1830. vol. 2, pt. 2. (Ac.8430).

Tucker Harris, 1747-1821

Tentamen medicum de cholera spontanea, etc. Edinburgi, 1771. (T.253.4)

Thomas Jefferson, 1743-1826

Notes on the state of Virginia. Written by T. Jefferson in...1781...enlarged in, 1782...for the use of a foreigner of distinction, etc. (Draught of a fundamental constitution for the state of Virginia.) [Paris]: 1782, [1784]. (C.38.d.27); London: J. Stockdale, 1787. (278.g.44); (979.h.31); (G.15990). [And other editions].

George Milligen Johnston,

A short description of the province of South Carolina, with an account of the air, weather and diseases. Written in ... 1763. London: J. Hinton, 1770. (10409.cc.14)

Absalom Jones, 1746-1818, and Richard Allen, 1760-1831

A narrative of the proceedings of the black people during the late awful calamity in Philadelphia in...1793 [the yellow fever epidemic], and a refutation of some censures thrown upon them in some late publications. Philadelphia: Printed for the authors, 1794. (8157.b.6.(3))

John Jones, 1729-1791

Plain concise practical remarks, on the treatment of wounds and fractures: to which is added, a short appendix on camp and military hospitals: principally designed for the use of young military surgeons, in North-America. New-York: J. Holt, 1775. (MFR-3019 *1* Reel 35:4 DSC)

Letter

A letter from one in the country to his friend in the city: in relation to their distresses occasioned by the doubtful and prevailing practice of the inoculation of the small-pox. Boston, 1721. (1174.d.46.(9))

A letter to a friend in the country, attempting a solution of the scruples and objections of a conscientious or religious nature, commonly made against the new way of receiving the small-pox. By a minister in Boston. (1174.d.46.(8))

William Lewis, 1708-1781

Experiments and observations on American potashes, with an easy method of determining their respective qualities. London, 1767. (1143.f.18); (1651/910).

John Lining, 1708-1760

A description of the American Yellow Fever, which prevailed at Charleston ... in ... 1748. Phildelphia, 1799. (7806.bb.5.(1))

James Logan, 1674-1751

Experimenta et meletemata de plantarum generatione nec non canonum pro inveniendis refractionum, tum simplicium, tum in lentibus duplicium focis demonstrations geometricae. Lugduni Batavorum, 1739. (968.k.8.(1)); Experimenta et Meletamata...translated from the Latin. London, 1747. (968.k.8.(2)); Another copy, (116.k.15); Another copy, (B.60.(3)).

Experiments and considerations on the generation of plants. London, 1747. (MFR/3019 *1* Reel 10:5 DSC6

Aaron Loocock

Some observations and directions for the culture of madder. Charleston, S.C., 1775. (MFR-3010 *1* Reel 10:7 DSC).

Cotton Mather, 1663-1728

An account of the method and success of inoculating the small-pox in Boston in New-England. London: J. Peele, 1722. (117.k.16); (1174.h.22.(7))

Sentiments on the small pox inoculated. In Increase Mather, Several reasons proving that inoculating or transporting the small pox, is a lawful practice. 1921. (07561.f.34)

The Christian philosopher: a collection of the best discoveries in nature, with religious improvements. London, 1721. (1114.g.8)

Increase Mather, 1639-1723

A discourse concerning comets ... and the ... earthquakes, famines and wars attending their appearance, from the beginning of the world, etc. Boston, 1683. Repr. London, 1811. (8563.b.24)

A discourse concerning earthquakes, occasioned by the earthquakes which were in New England, in the province of Massachusetts Bay, June 16, and in Conecticot-Colony, June 22, 1705. Boston: T. Green, 1706. (MFR-3019 Reel 21-12 DSC)

A further account from London of the small-pox inoculated. 2nd edition. With some remarks on a late scandalous pamphlet, entituled: Inoculation of the small-pox as practised in Boston. Boston, 1721. (1174.d.46.(14))

Heaven's alarm to the world, or a sermon, wherein is shewed that fearful sights and signs in heaven are the presages of great calamities at hand. Boston: John Foster, 1681. (MFR-3008 *1* Reel 52:8 DSC)

Kometographia, or, a discourse concerning comets; wherein the nature of blazing stars is enquired. Boston: Printed by S.G. for S.S. and sold by J. Browning, 1683. (MFR-3019 *1* Reel 7:7 DSC)

John Mitchell, 1711-1768

American husbandry: containing an account of the soil climate production and agriculture of the British colonies in North-America and the West Indies. London: J. Bew, 1775. (MFR-3010 *12801* Reel 5:2 DSC)

The present state of Great Britain and North America. London, 1767. (Mic.F.232 no. 61362); (MFR-1700 *4549* DSC); (MFR-3017 *1* Reel 117:5 DSC) (MFR-3017 *1* Reel 4:6 DSC)

Dissertatio brevis de principiis botanicorum et zoologorum deque novo stabiliendo naturae rarum congruo cum appendice aliquot generum plantarum recens conditorum et in Virginia observatorum. [s.l.]: Norimbergae, W. Schwarzkopfii, 1769. (T.665.4); (B.336.(2)).

The contest in America between Great Britain and France. London: A. Millar, 1757. (MFR-3017 *1* Reel 13:3 DSC); (Mic.F. 232)

A map of the British and French dominions in North America, with the roads, distances, limits and extents of the settlements. 2nd ed. London, 1755. (Maps.C.25.c.2); (Maps.C.25.c.3); 4th ed. (aka "the Red-lined map"). London. (Maps.K.Top.118.49.b); (facsimile: Maps.20.e.15.(2))

Andrew Oliver

An essay on comets, etc. Salem: S. Hall, 1772. (8562.ee.3.(2))

Felix Pascalis Ouviere, 1762-1833

An account of the contagious epidemic yellow fever which prevailed in Philadelphia in the summer and autumn of 1797: the questions of its causes and domestic origin, characters, medical treatment, and preventives. Philadelphia: Snowden & McCorkle, 1798. (RB.23.b.2985)

Charles Willson Peale, 1741-1827

Discourse introductory to a course of lectures on the science of nature. Philadelphia, 1800. (B.328.(3))

Introduction to a course of lectures on natural history. Delivered in the University of Pennsylvania, November 16, 1799. (B.334.(2))

A scientific and descriptive catalogue of Peale's Museum. Philadelphia: Samuel H. Smith, 1796. (MFR-3019 *1* Reel 4:14 DSC)

Thomas Prince, 1687-1758

An improvement of the doctrine of earthquakes, being the works of God and tokens of his just displeasure. Containing an historical summary of the most remarkable earthquakes in New-England, from the first settlements of the English here, as also in other parts of the world since 1666. To which is added, a letter to a gentleman giving an account of the earthquake felt in Boston, November 18, etc. Boston, 1755. (7107.a.47) [This reprint of Prince's 1727 sermon also includes the suggestion that the secondary cause of earthquakes might be electrical in nature. His suggestion that Bostonians may have brought the earthquake upon themselves by having erected so many lightning rods in their city, prompted the publication of John Winthrop's lecture on earthquakes. See below).

Edmund Quincy, 1703-1788

A treatise of hemp husbandry; ... with some introductory observations, upon the necessity which the American British colonies are under, generally to engage in the said production, etc. Boston, 1765. (1509/1088).

David Ramsay, 1749-1815

A sketch of the soil, climate, weather and diseases of South Carolina. Charlestown, 1796. (T.173.(5))

David Rittenhouse, 1732-1796

Father Abraham's alamanac, for...1766 (70, 77, 78, 80, 81, 1806, 1808)...by Abraham Weatherwise, etc [The astronomical calculations by D. Rittenhouse and J. Sharp.] Lancaster, Philadelphia, [1765-1805]. (P.P.2517.c.)

The universal almanack for ... 1777... D. Rittenhouse A.M. has favour'd us with the calculations, etc. Philadelphia, [1776]. (P.P.2517.a.(4))

An oration delivered...before the American Philosophical Society, held at Philadelphia, for Promoting Useful Knowledge. Philadelphia: J. Dunlop, 1775. (12301.m.18.(1))

"An account of the transit of Venus..." Transactions of the American Philosophical Society. Philadelphia: R. Aitken & Son, 1789. Vol. 1, 2nd ed.

Benjamin Rush, 1746-1813

Praes. Dissertatio de coctione ciborum in ventriculo, etc. Edinburgi, 1768. (T.263.(3)). Four other copies: (T.290.(1)); (T.72.(6)); (T.387.(7)); (T.393.(8)).

A dissertation on the spasmodic asthma of Children: in a letter to Dr Millar. London, 1770. (T.991.(2))

Sermons to gentlemen upon temperance and exercise. Philadelphia: John Dunlap, 1772. (MFR 3019 *1* Reel 31:7 DSC)

Sermons to the rich and studious, on temperance and exercise. With a dedication to Dr Cadogan. London: Edward & Charles Dilly, 1772. (T.440.(4))

Experiments and observations on the mineral waters of Philadelphia, Abington, and Bristol, in the province of Pennsylvania. Read June 18, 1773, before the American Philosophical Society, held at Philadelphia. (MFR 3019 *1* Reel 15:11 DSC)

An oration, delivered February 4th, 1774, before the American Philosophical Society at Philadelphia, containing an enquiry into the natural history of medicine among the Indians of North-America...With an appendix, containing notes and illustrations. [Philadelphia, 1774]. (T.81.(6)); Second edition. London, 1786. (T.158.(4)); Another copy. (117.c.61).

Directions for preserving the health of soldiers: recommended to the consideration of the officers of the army of the United States. Lancaster: John Dunlap, 1778. (MFR 3019 *1* Reel 31:2 DSC)

A plan for the establishment of public schools and the diffusion of knowledge in Pennsylvania. Philadelphia: Thomas Dobson, 1786. (MFR 3012 *1* Reel 5:2 DSC)

An oration, delivered before the American Philosophical Society held in Philadelphia, on the 21st of February, 1786: containing and inquiry into the influence of physical causes upon the moral faculty. Published at the request of the Philosophical Society. Philadelphia: Charles Cist, 1786. (MFR 3008 *1* Reel 17:2 DSC)

An enquiry into the effects of public punishments upon criminals and upon society. Philadelphia, 1787. (T.381.(6))

Medical enquiries and observations upon the diseases of the mind. 2nd edition. London: C. Dilly, 1789. (1039.k.31); 2nd American edition. 2 vols. Philadelphia, 1794, 93.

(1404.h.1); [Another edition]. Philadelphia: Kimber & Richardson, 1812. (MFR 3019 *1* Reel 31:4 DSC); Facsimile of 1812 edition. New York: Hafner Publishing Co., 1962. (7326.s.18)

An inquiry into the effects of spirituous liquors upon the human body and their influence upon the happiness of society. Edinburgh, 1791. (8345.aaa.69.(1)); Sixth edition, with additions. New York, 1811. (7405.aa.46); Seventh edition, with additions. Boston: Manning & Loring, 1812. (1507/278).

An account of the sugar maple-tree of the United States, and of the methods of obtaining sugar from it...Read in the American Philosophical Society, etc. Philadelphia: R. Aitken & Son, 1792. (T.101.7*); An account of the sugar-maple tree, of the United States...in a letter to Thomas Jefferson...Read in the American Philosophical Society, on the 19th August 1791, etc. Philadelphia printed; London: reprinted by J. Phillips, 1792. (1651/563(1))

An enquiry into the origin of the late epidemic fever in Philadelphia: in a letter to Dr John Redman, president of the College of physicians. Philadelphia: Carey, 1793. (MFR 3019 *1* Reel 31:3 DSC)

An account of the state of the body and mind in old age; with observations on its diseases and their remedies. 1793. In: Sir J. Bart Sinclair, The Code of Health, etc., vol. 4, 1807, etc. (41.d.18)

An account of the bilious remitting yellow fever, as it appeared in the city of Philadelphia in...1793. Second edition. Philadelphia: T. Dobson, 1794; Another edition. Edinburgh: J. Symington, 1796. (Cup.501.aaa.33).

A eulogium, intended to perpetuate the memory of D. Rittenhouse, late resident of the American Philosophical Society. Delivered...17th December, 1796 etc. Philadelphia, 1796. (T.154.(12). Another copy. (T.1512.(1))

Essays, literary, moral and philosophical. Philadelphia, 1798. (12296.f.16); Second edition, with additions. (12296.f.17)

Observations upon the origin of the malignant bilious, or yellow fever in Philadelphia, and upon the means of preventing it: addressed to the citizens of Philadelphia. Philadelphia: Thomas Dobson, 1799. (MFR 3019 *1* Reel 31:5 DSC)

A second address to the citizens of Philadelphia, containing additional proofs of the domestic origin of the malignant bilious, or yellow fever: to which are added, observations, intended to shew that a belief in that opinion, is calculated to lessen the morality of the disease, and to prevent its recurrence. Philadelphia: Thomas Dobson, 1799. (MFR 3019 *1* Reel 31:6 DSC)

The autobiography of Benjamin Rush, his "Travels through life", together with his commonplace book for 1789-1813. Princeton: Princeton University Press, 1948. (Ac.1830/8); Another edition. (77.100 v.25 DSC)

[A eulogium upon Benjamin Rush, M.D., ... written at the request of the Medical Society of South Carolina, and delivered ... 10 June 1813. Philadelphia, 1813. (550.d.13)

Benjamin Rush's lectures on the mind. Eric T. Carlson, Jeffrey L. Wollock, Patricia S. Noel, eds. Philadelphia: American Philosophical Society, 1981. (Ac.1830/8[vol.144])

An inquiry into the influence of physical causes upon the moral faculty. Delivered before a meeting of the American Philosophical Society, etc. Philadelphia, 1839. (8404.e.33.(2))

Letters of Benjamin Rush. L.H. Butterfield, ed. 2 vols. Princeton, NJ: Princeton University Press, 1951. (Ac.1830/8)

The new method of inoculating for the small pox, delivered in a lecture, etc. Philadelphia, 1781. (T.447.(8))

Thoughts upon female education, accommodated to the present state of society, manners, and government, in the United States of America. Philadelphia: Prichard & Hall, 1787. (MFR 3012 *1* Reel 5:3 DSC)

Observations on the epidemical diseases of Minorca, from the year 1744 to 1749...With notes by Benjamin Rush, M.D. By George Cleghorn, Surgeon. Philadelphia: F. Nichols, 1809. (1508/1631)

Observations upon the cause and cure of the tetanus (in a Letter to J.C. Lettsom). [Philadelphia, 1785]. (T.326.(3)); Another copy. (T.326.(3*); Another copy. (T.380.(3*)).

The works of Thomas Sydenham on acute and chronic diseases with their histories and modes of cure: with notes...by Benjamin Rush. Philadelphia: Benjamin and Thomas Kite, 1809. (Cup.410.f.546)

Sixteen introductory lectures to courses of lectures upon the institutes and practice of medicine, with a syllabus of the latter: to which are added, two lectures upon the pleasure of the senses and of the mind, with an enquiry into their proximate cause. Delivered in the University of Pennsylvania. Philadelphia: Bradford and Innskeep, 1811. (MFR 3019 *1* Reel 36:2 DSC); Reprinted edition. Oceanside, NY: Dabor Science Publications, 1977. (X.329/18023)

Saint Pierre. Louis de.

A proposal for the further encouragement of the production of silk and growing of vines at the colony of New Bordeaux in South Carolina, settled by French Protestants, etc. [London], 1772. (215.i.2.(134))

Dissertatio anatomico medica de placentae cum utero nexu, etc. Edinburgi, 1761. (T.367.(7))

[By B.C. Corner]. William Shippen, Jr.: pioneer in American medical education. A biographical essay... with notes and the original text of Shippen's student diary, London, 1759-1760; together with a translation of his Edinburgh dissertation 1761. Philadelphia, 1951. Memoirs of the American Philosophical Society. Vol. 28. (Ac.1830/8)

Samuel Stanhope Smith, 1751-1819

An essay on the causes of the variety of complexion and figure in the human species. Philadelphia, 1788. (784.k.10)

James Stuart

A dissertation on the salutary effects of mercury in malignant fevers. Philadelphia, 1798. (T.328.(2))

Ezra Stiles, 1727-1795

A discourse on saving knowledge: delivered at the instalment of the Reverend Samuel Hopkins...into the pastoral charge of the first Congregational Church in Newport, Rhode Island, Wednesday 11 April, 1770. Newport: Solomon Southwick, 1770. (1578/3510)

John Tennent, c.1700-c.1760

An epistle to Dr. R. Mead concerning the epidemical diseases of Virginia, particularly a pleurisy and peripneumony, wherein is shown the surprising efficacy of the Seneca rattle-snake-root. Edinburgh, 1738. (1170.f.13)

Physical enquiries: discovering the mode of translation in the constitutions of northern inhabitants, on going to ... southern climates: an error of the College of Physicians in recommending vinegar to His Majesty's fleet in the West Indies: and the barren state of useful physical knowledge, as well as the mercenary practice of physicians, by an impartial statement of Dr Ward's qualifications for the practice of physic...illustrated with remarks upon a printed letter to a Member of Parliament, signed Philanthropos, etc. London, 1742. (C.142.a.29.(6)); Second edition. London, 1749. (T.241.(3))

William Charles Wells, 1757-1817

Disputatio Medica Inauguralis de Frigore, etc. Edinburgi, 1780. (T.293.(13))

An essay on dew; and several appearances connected with it. London, 1814. (538.e.17)

An essay upon single vision with two eyes; with experiments and observations on several other subjects in optics. London: T. Cadell, 1792. (T.1393.(2)); Another copy, (1651/1118).

Observations and experiments on the colour of blood... From the Philosophical Transactions. [London, 1797?] (L.32/71)

A letter to ... Lord Kenyon, relative to some conduct of the college of Physicians in London posterior to the decision of the Court of the King's Bench in the case of Dr Stanger, etc. London, 1799. (T.163.(2))

Memoirs of W.C.W....with an account of his writings. (Extracted from the Gentleman's Magazine, October and November, 1817.) London: T. Kelly, 1818. (10803.b.7.(5))

Two Essays: one upon single vision with two eyes; the other on dew. A letter to ... Lord Kenyon and an account of a female...part of whose skins resembles that of a negro...with a memoir...written by himself. London: A. Constable and Co., 1818. (012357.i.16).

Benjamin West, 1730-1813

An account of the observation of Venus upon the sun, the third day of June, 1769, at Providence, in New England. With some account of the use of those observations.

The New-England almanack, for 1764 (66). By B. West. Providence, [1763-65]. (P.P.2517.o).

Edward Williams,

Virginia's discovery of silke-wormes, with their benefit: and the implanting of mulberry trees. Also the dressing and keeping of vines, for the rich trade of making wines there. Together with the making of the saw-mill, very useful in Virginia, for cutting of timber and clapboard, to build withal, and its conversion to other as profitable uses. London: J. Stephenson, 1650. (MFR-3017 *1* Reel 12:7 DSC)

Virginia, more especially the south part thereof richly and truly valued ... The second edition, with the addition of The Discovery of Silkworm, with their benefit, and implanting of mulberry trees, etc. [With woodcuts]. 2 pts. 1650. (B.626.(4-5)); (G.7129.(1-2))

John Williams,

Several arguments, proving that inoculating the small-pox is not contained in the law of physick, either natural or divine, and therefore unlawful. Together with a reply to two short pieces, one by Dr Increase Mather, and another by an anonymous author, entitled, Sentiments on the Small Pox Inoculated. And also, a short answer to a later letter, in the New England Courant. Second edition. Boston, 1721. (1174.d.46.(6))

An answer to a late pamphlet intitled [sic], a Letter to a friend in the country attempting a solution of the scruples and objections of a conscientious nature, commonly made against the new way of receiving the small pox by a minister of Boston. Together with a short history of the divisions among us in affairs of state, etc. Boston, 1722. (1174.d.46.(10))

Samuel Williams, 1743-1817

The natural and civil history of Vermont. Walpole, NH: Isaiah Thomas and David Carlisle Jr., 1794. (798.h.20). [And other editions].

John Winthrop, 1714-79

A lecture on earthquakes, read in the chapel of Harvard College...November 26th...on the occasion of the...earthquake which shook New-England the week before. Boston, 1755. (7107.aaa.53)

Relation of a voyage from Boston to Newfoundland, for the observation of the transit of Venus, June 6, 1761. Boston, 1761. (8561.bb.19)

Two lectures on comets, read in the chapel of Harvard College, in Cambridge, New England, in April 1759: on occasion of the comet which appeared that month. With an appendix concerning the revolutions of that comet and of some others. Boston: Green & Russell, 1759. (8562.b.18); (1651/1708); [Another edition] Boston, 1811. (1395.c.8); (959.a.3).

Two lectures on the parallax and distance of the sun, as deducible from the transit of Venus. Read in Holden Chapel at Harvard College, in Cambridge, New England, in March 1769. Published by the general desire of the students. Boston: Edes & Gill, 1769. (8561.cc.39)

American Philosophical Society

Transactions of the American Philosophical Society. Philadelphia, 1769- . (Ac.1830/3); (435.c.1).