

**AMOS EATON
PAPERS, 1797-1846****SC10685**

QUANTITY: 6 boxes and 6 extra-large folders (ca. 2.0 cubic ft.)
ACCESS: Open to research
ACQUISITION: Purchased; Mrs. C. E. Smith, 1936; includes accretions from single accessions 135, 4603, 4604, and 12606.
PROCESSED BY: Fred Bassett, Senior Librarian, Manuscripts and Special Collections, April 2007. (Index to letters compiled by Lauren M. Barber, ca. 1980.)

Biographical Sketch:

Amos Eaton, natural scientist, educator, and co-founder of the Rensselaer School, was born on May 17, 1776 in New Concord parish (now Chatham, Columbia County), New York. Eaton graduated from Williams College in 1799, and despite an interest in the natural sciences, undertook the more practical study of law in New York City. He was admitted to the state bar in 1802. From 1802 to 1810 he practiced law and worked as a land agent and surveyor in Catskill, New York. In 1811 Eaton was wrongfully convicted and imprisoned on charges of forgery in a land dispute. During his incarceration he began a course of scientific studies. Governor DeWitt Clinton granted him an unconditional pardon in 1816. Thereafter, Eaton spent a year at Yale College studying science. In 1817, he returned to Williams College where he introduced a very successful course of scientific lectures on botany.

In 1818 Eaton moved to the Troy-Albany area which had become a center of industrial and commercial growth. He spent the next six years as an itinerant lecturer, ranging from West Point, New York, to the Castleton Medical Academy in Vermont, and compiled textbooks in chemistry, zoology, and geology. Under Stephen Van Rensselaer's patronage he undertook geological and agricultural surveys of Albany and Rensselaer counties and across New York State along the route of the Erie Canal. His published survey reports earned him recognition in American geology.

Eaton's most significant and lasting contribution was to scientific education. He developed a teaching theory and methods that focused on "the application of science to the common purposes of life." In contrast to the then current method of learning by rote, students were to learn by doing. Students went on field trips to gather specimens, performed experiments in laboratories, and prepared and delivered lectures, with the instructor and fellow students serving as critics.

To implement his novel ideas, Eaton enlisted the support of Stephen Van Rensselaer in founding the Rensselaer School in 1824. Eaton served as senior professor at Rensselaer for the rest of his life and trained a significant number of influential scientists, including James Hall, J.C. Booth, Asa Fitch, Ebenezer Emmons, G.H. Cook, Abram Sager, E.S. Carr, Douglass Houghton, and Eben Horsford. In 1835 Eaton further developed his curriculum and gave it even more focus on practicality. The Rensselaer School eventually was renamed Rensselaer Institute and was

divided into separate departments of science and engineering. Eaton remained at the institute until his death on May 10, 1842 at age 66.

Scope and Content Note:

The papers of Amos Eaton consist chiefly of correspondence and journals (diaries) related primarily to his career as senior professor at Rensselaer (later Rensselaer Polytechnic) Institute under the patronage of Stephen Van Rensselaer, and to his geological survey tours along the Erie Canal route. His work on the canal survey project is documented in detailed journals he kept that include sketch maps, diagrams and charts. He published several reports using the information in these "geological profiles". In addition, Eaton compiled a journal of geological studies he had conducted primarily in the southern tier region of New York State and various places in New England, and produced a colorful map depicting the economic geology of New York State.

Eaton's academic career at Rensselaer Institute is documented in notebooks, reports, essays, and printed materials related to curriculum development, methods of instruction, and examination along with results of field trips. In addition, Eaton kept a record book that contained financial accounts of students, rosters of students by class year, and rules and regulations governing Rensselaer Institute. In his correspondence are details regarding the careers of former students, controversies over the school property and over continued support by the Van Rensselaer family.

These papers also include journals and reports compiled by George Johnson (student at Rensselaer Institute; later Eaton's brother-in-law) on the Erie Canal enlargement, 1837-1840. The entire collection covers the years 1798 to 1846.

Supplementing these papers are letters and documents of Amos Eaton found in other manuscript collections held by the New York State Library. The *Daniel Hall Papers* (SC10714) include six Eaton letters and a poem about him. Of special interest in the Hall Papers is the letter from Eaton to his wife, Sally, February 7, 1814, written while he was in prison. The *Van Rensselaer Manor Papers* (SC7079) include letters to Stephen Van Rensselaer (Boxes 76-79) and a proposed contract (Box 79) for the establishment of Rensselaer Institute, October 29, 1824.

Container list:

Box	Folder	Contents
		Correspondence. 1798-1845 (See Index to Letters by Correspondent)
1	1	Letters by Eaton, 1830-1840 (4 items)
1	2	Letters to Eaton, 1798-1820 and undated (3 items)
1	3	Letters to Eaton, 1821-1825 (10 items)
1	4	Letters to Eaton, 1826-1829 (16 items)
1	5	Letters to Eaton, 1830-1833 (14 items)
1	6	Letters to Eaton, 1834-1835 (22 items)
1	7	Letters to Eaton, 1836-1837 (19 items)
1	8	Letters to Eaton, 1838-1844 (17 items)
1	9	Letters to Moses Hale, Eliphalet Nott, and others, 1817-1846; most of the letters were written by Stephen Van Rensselaer (10 items)

Box	Folder	Contents
		Sundry Papers
1	10	<p>Writings of Eaton and others, 1827-1845 (11 items)</p> <ol style="list-style-type: none"> Newspaper clipping re: Mechanics Mutual Insurance Company (advertisement). One Orsamus Eaton listed as a director. n.d. Instructions to Printer (by Eaton?) n.d. Short biographical notes possibly by Eaton, n.d. Essay on Metaphysics by unknown writer, n.d. Probable list of students at Rensselaer Institute, n.d. Report to Reverend Doctor Chester, president of Rensselaer School, August 27, 1828. By Cyrus Bryant, officer of the day. Proposal to Rensselaer Institute, November 25, 1845, Troy. Opinion. By E. Williams, December 13, 1810 References to be made by students under the direction of a teacher, while studying botany with living specimens, ca. 1840 List of topics in which certain named student should be qualified to present a lecture, June 18, 1837. Miscellaneous scraps (2 items)
1	11	<p>Legal and business papers, 1819-1834 (5 items)</p> <ol style="list-style-type: none"> Indenture (Lease) between James Van Schoonhoven and Amos Eaton, September 25, 1827. Agreement between Amos Eton and Jacob Groat, March 30, 1835. List of debts to Amos Eaton, 1829-1834. Receipted bill to Rensselaer School from Tallmadge and Parker, June 23, 1829. Note to Rockwell J. Stebbins from Amos Eaton, December 27, 1819.
		Journals, 1822-1829 (photostatic copies found in Box 6, Folders 6-10)
2	1	<p>Journals "A" and "B", 1822-1823; 1 v.; ca. 150 p.; 20 cm.</p> <p>Journal "A": "Journal of the first tour on the Canal Rout[e] for taking a geological and agriculture survey for the Hon. Stephen Van Rensselaer, commenced November 11, 1822" 100 p.</p> <p>Journal "B": "Amos Eaton's Geological Journal, May and June 1823, being the Second Canal Tour for the Hon. Stephen Van Rensselaer" 49 p. (begins at reverse end of volume)</p>
2	2	<p>Journals "C" and "D", 1823-1824; 1 v.; ca. 170 p. 20 cm.</p> <p>Journal "C": "Amos Eaton's Geological Journal, July-August 1823, being the Third Canal Tour for the Hon. Stephen Van Rensselaer" 116 p.</p> <p>Journal: "Amos Eaton's Geological Journal, November 18th-[29th] 1823, being the Fourth Canal Tour for the Hon. Stephen Van Rensselaer" (title of unlettered section that immediately follows Journal "C" from pages 117 to 131)</p>

Box	Folder	Contents
		Journal "D": "Amos Eaton's Geological Journal, July-August 1824, being the Fifth Canal Tour for the Hon. Stephen Van Rensselaer" 50 p. (begins at reverse end of volume)
2	3	Journal "E", 1826-1827; 1 v.; ca. 200 p.; 20 cm. "Amos Eaton's Geological Journal, from May 1 st to June 10 th 1826, being the Sixth Canal Tour for the Hon. Stephen Van Rensselaer" (Canal tour on pp. 1-46 followed by miscellaneous remarks on pp. 47-78) "Journal of a Geological Tour by way of Helderberg and Catskill Mountains, Hudson, Chatham, Lebanon Springs, Lanesborough, Savoy, Adams, Williams College, Petersburg, and Grafton. Commenced July 2, 1827. Accompanied by Messrs. Edward Sanford, Hiram Arnold, and Thomas Emory Jr. – Completed July 13 th ." (pp. 79-115) This volume also includes a record of "expenses of the Rensselaer School Expedition [sixth canal tour], Commencing May 1, 1826 [to June 10, 1826]" ca. 10 p.
2	4	Journal "F", 1828; 1 v.; ca. 200 p.; 20 cm. "Amos Eaton's Geological Journal commenced June 16, 1828". Tour of towns along the Eire Canal, June 16-18, 1828. Also includes geological tour through New England in company of Courtland Van Rensselaer, May-June 1829; second geological tour through southern tier of New York State and adjoining parts of Pennsylvania and New Jersey, July-October 1829; attached to inside of back board is an annotated map of New York State, ca. 1820s.
		Notebooks and other writings, 1814-1839
3	1	A system of mineralogy ... by A. Eaton, 1814-1815 1 v.; 337 p. ; 22 cm.
3	2	Notebook of botanical names, 1817; 1 v.; 31 p. 20 cm.
3	3	Journal of exercises in shops of artists and manufacturers by students of Rensselaer in fall term of 1826; 1 v.; ca. 100 p.; 20 cm.
3	4	Notebook on Mathematical arts, ca. 1838; 1 v.; ca. 100 p. ; 20 cm.
		Rensselaer Institute Records
4	1	Notebook of subjects assigned to individual students at Rensselaer Institute for lectures, 1839; 1 v.; ca. 100 p.; 20 cm.
4	2	Rensselaer Institute Record Book 1824-1845; 1 v.; ca. 300 p. 34 cm. Contains student financial accounts (boarding and tuition fees), 1834-1844, rosters of students by class year, 1826-1827 and 1834-1845; printed copy of the constitution and bylaws, 1825, and copy of letter of Stephen Van Rensselaer to Rev. S. Blatchford setting forth regulations for the newly established school, November 5, 1824. (transcription by Doris Sheridan available in library, A,378.74741,qE14,92-43784)
		George Johnson Papers, 1836-1840
5	1	Diary, 1836-37 (student at Rensselaer Institute); 1 v. ca. 100 p.; 16 cm.
5	2	Mathematical notebook kept while a student at Rensselaer Institute, ca. 1836-

Box	Folder	Contents
		1838; 1 v. ca. 150 p.; 21 cm.
5	3	Natural Science notebook kept while student at Rensselaer Institute, 1838; 1 v. ca. 150 p.; 20 cm.
5	4	Journal relative to Erie Canal enlargement, 1838; 1 v. ca. 60 p.; 7 x 20 cm.
5	5	Journal relative to Erie Canal enlargement, 1839-1840; 1 v. ca. 200 p.; 19 cm.
6	1	Notebook related to work on enlarging the Erie Canal, 1839; 1 v.; ca. 200 p.; 16 cm.
6	2	Cost estimates for labor, materials, supplies, etc. required for the enlargement of the Erie Canal by George Johnson, 1839-1840 (16 items)
6	3	Eaton, Amos. <i>A Geological and Agricultural Survey of Rensselaer County, in the State of New-York: To Which Is Annexed, a Geological Profile, Extending from Onondaga Salt Springs, across Said County, to Williams College in Massachusetts. Taken under the Direction of the Honorable Stephen Van Rensselaer.</i> Albany, [N.Y.]: Printed by E. and E. Hosford, 1822. 70 p.; illus.; 23 cm.
6	4	Eaton, Amos. <i>Rensselaer School Extended.</i> [n.p., 1829]. 1 broadside; 25 cm.
6	5a	Eaton, Amos. <i>Eaton's Geological Notebook for the Troy Class of 1841.</i> [Boston: s.n., 1841]. 13 p.; 21 cm.
6	5b	<i>Rensselaer Institute Semi-annual Session, for 1841-1842.</i> [Troy, N.Y.: s.n., 1841]. 12 p.; 19 cm.
6	5c	<i>Practical Trigonometry, Mensuration and Surveying, for the Use of Students in Rensselaer Institute.</i> Troy, N.Y., Printed at the Budget Office, 1845. 12 p.; illus. (diags.) 19 cm.
		Photostats
6	6	Journal A, first canal tour
6	7	Journal B, second canal tour
6	8	Journal C, third canal tour
6	9	Journal (unlettered), fourth canal tour
6	10	Journal D, fifth canal tour
6	11	Journal (diary), Williams College, 1797 (the original manuscript is held by Williams College, Williamstown, Massachusetts; transfer from single accession: 12606)
		Extra-Large Documents
EL	1	Portrait, Amos Eaton, n.d.
EL	2	Prediction of a lunar eclipse (computations and illustration) by John L. Riddell of Rensselaer School, September 8, 1829
EL	3	A map exhibiting the Economic Geology of New York State being an accurate outline to be filled up by individual naturalists. Prepared by Amos Eaton at the expense and direction of the Honorable Stephen Van Rensselaer, 1830-1832. 1 item; 32 x 39 cm. Accompanied by a letter of Amos Eaton to Governor William L. Marcy, January 30, 1836. (2 items; transferred from single accession: 135)
		Maps and Surveys
EL	4	a. Map of Scofield Farm, ca. 1800 b. Map of Walter Franklin Patent, November 18, 1803 by Amos Eaton.

Box	Folder	Contents
EL	5	<ol style="list-style-type: none">a. Field notes related to Lansingburgh Road, 1799-1801 (copied from town records)b. Map of the Old Bank Place in the City of Troy in Rensselaer County. Being the tract formerly occupied by The Farmers Banking company. May 17, 1836c. Catskill Mountain Survey and the convexity of the earth, September 1830
EL	6	<ol style="list-style-type: none">a. Map of Portage Hill and vicinity near the Genesee River, ca. 1830sb. Map of the Genesee River at Portageville, New York, ca. 1830sc. Map of proposed tunnel (near Portageville, N.Y.?)

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