



Smithsonian Institution Archives

Vail Telegraph Collection, 1830-1898, 1912-1917

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Collection Overview

Repository:	Smithsonian Institution Archives, Washington, D.C., osiaref@si.edu
Title:	Vail Telegraph Collection
Identifier:	Record Unit 7055
Date:	1830-1898, 1912-1917
Extent:	10.14 cu. ft. (10 document boxes) (4 half document boxes) (6 16x20 boxes) (oversize material)
Creator::	
Language:	English

Administrative Information

Preferred Citation

Smithsonian Institution Archives, Record Unit 7055, Vail Telegraph Collection

Access Restriction

Some items cannot be reproduced due to bindings.

Historical Note

Alfred Vail (1807-1859) was born in Morristown, New Jersey, where his father was owner of the Speedwell Iron Works. After working in his father's shop and preparing for the Presbyterian ministry, Alfred became interested in Samuel F. B. Morse and his telegraph. In 1837 a contract was drawn between Vail and Morse whereby Vail would construct a complete set of instruments and secure U. S. and foreign patents for them at his expense, in return for one-fourth interest in the American rights and one-half interest in the patents secured abroad. Stephen and George Vail (Alfred's father and brother) invested. Alfred, Morse, and Leonard D. Gale worked in the Speedwell shops and on January 6, 1838, demonstrated the improved telegraph. Some sources give Alfred Vail the major credit for the perfection of the instruments. Congress did not purchase the telegraph as they had hoped, but Congressman Francis O. J. Smith became a partner with 4/16 interest; subsequently, friction developed between Smith and others in the telegraph enterprise. On the capital completed by Smith's contribution, Morse went to Europe to establish the enterprise there, and Alfred lost interest; from 1839-1843, Alfred conducted his father's business in Philadelphia. In 1843, when Congress passed the act to build the Washington-Baltimore line, Vail became Morse's chief assistant and stayed with Morse until 1845, but then was relieved from duty in Washington by Morse, and by 1848 resigned as superintendent in Philadelphia. In 1845, Alfred published *The Electro Magnetic Telegraph* and in 1849, *The Register of the Electro Magnetic Telegraph Companies*. After 1848, Vail's interest in the telegraph was mostly passive. He realized little money from his interest in the telegraph and died poor in 1859.

Descriptive Entry

This collection contains papers concerning the invention and development of the telegraph by Samuel F. B. Morse, Alfred Vail, and others, especially Vail's work with telegraph instruments and operation of telegraph stations, patent litigation, and Vail's publications concerning the telegraph; correspondence between Alfred and George Vail concerning their investment in the early telegraph enterprise; correspondence between Alfred Vail, Morse, Amos Kendall, and others, from 1837, relating to development of the telegraph; litigation and patents; administration of companies, especially the Magnetic Telegraph Company; the Morse-Joseph Henry dispute and litigation between Morse, Francis O. J. Smith, and Henry O'Reilly; correspondence between Alfred Vail and many persons concerning construction of lines and training of operators (especially valuable is that concerning construction of the Washington-Baltimore line); some Alfred Vail research notes and correspondence relating to insulation and insulators, receiving magnets and keys, and laying line in lead pipe; account books, copies of contracts, agreements and assignments, and patent applications; extensive telegraph journals; data accumulated by Alfred Vail concerning rates and telegraph lines; correspondence, returned questionnaires, and other items relating to Vail's publications, especially *The Electro Magnetic Telegraph* and *The Telegraph Register of the Electro-magnetic Telegraph Companies in the United States and the Canadas*; scrapbooks kept by Alfred Vail and his wife Amanda relating to the history of the telegraph; and correspondence of Amanda Vail after Alfred's death, relating to his role in telegraph development.

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- Science -- History
- Technology -- History
- Telegraph

Types of Materials:

- Black-and-white photographs
- Diaries
- Field notes
- Manuscripts
- Scrapbooks

Names:

- Henry, Joseph, 1797-1878
- Kendall, Amos, 1789-1869
- Magnetic Telegraph Company
- Morse, Samuel Finley Breese, 1791-1872
- O'Reilly, Henry, 1806-1886
- Smith, Francis O. J. (Francis Ormond Jonathan), 1806-1876
- United States National Museum
- Vail, Alfred, 1807-1859
- Vail, Amanda, d. 1894
- Vail, George, 1809-1875
- Vail, James Cummings
- Vail, Stephen, 1780-1864

Preferred Titles:

The Electro-Magnetic Telegraph (Monograph)
*The Telegraph Register of the Electro-magnetic Telegraph Companies in the United States and the
Canadas (Monograph : 1849)*

Container Listing

Series 1: ALFRED VAIL CORRESPONDENCE.

Box 1

- Box 1 of 9 "Miscellaneous Correspondence, 1830-1846," bound volume; incoming and outgoing correspondence, arranged chronologically; some accounts; pre-1844, one tenth of volume, consists of family correspondence, post-1844 primarily relating to the telegraph; mostly relating to Vail's work as superintendent of the Magnetic Telegraph Company, and plans for organization of other telegraph lines; includes one Henry Clay letter regarding Clay's wish that the government rather than private individuals gain control over the telegraph, September 10, 1844.

Box 1A

- Box 1A of 9 "Private Correspondence, 1836-1848, George Vail, Samuel F. B. Morse, Francis O. J. Smith, Amos Kendall, and Leonard D. Gale," bound volume; incoming and outgoing correspondence arranged by correspondent and chronologically; mostly relating to financing the telegraph enterprise, proposed sale to the government, and the Morse-Vail relationship; organized as follows: George Vail, 1838-1848; Morse, 1837-1848, about 100 letters; Gale, 1838-1845, 1848; Kendall, 1845-1848; Smith, 1838-1839, 1844-1848.

Box 2

- Box 2 of 9 Unbound Correspondence, 1838-1858; incoming and outgoing letters, some fragments from bound letter books and diaries; mostly relating to operation of telegraph lines and to technical and equipment design problems.
[Digital Content: Letter from Samuel Morse to Alfred Vail, January 15, 1857. \[Image nos. SIA2011-0816 to SIA2011-0821\]](#)
[Digital Content: Letter from Samuel Morse and Alfred Vail to Joseph Henry, July 22, 1846. \[Image nos. SIA2011-0822 \(front\) and SIA2011-0823 \(back\)\]](#)
[Digital Content: Letter from Alfred Vail to Samuel Morse, January 11, 1857. \[Image nos. SIA2011-0814 \(front\) and SIA2011-0815 \(back\)\]](#)
- Box 2 of 9 Correspondence, 1846-1850, 1 bound volume; incoming and outgoing correspondence, arranged chronologically, relating to operation of lines and to matters of patents, stock, and construction plans arising from contracts and agreements; especially regarding controversies involving Alfred Vail, Francis O. J. Smith, and Henry O'Reilly.
- Box 2 of 9 Correspondence and transcriptions of telegraph messages, 1848-1849, 1 bound volume.

Box 2 of 9 Correspondence, 1848-1851, incoming and outgoing correspondence, 2 bound volumes; arranged by correspondent and chronologically.

Box 2 of 9 Correspondence, 1850-1852, incoming and outgoing correspondence, 1 bound volume; arranged by correspondent and chronologically; extensive correspondence between Alfred Vail, Amos Kendall, and Samuel F. B. Morse relating to patents, stock, and other matters of the telegraph enterprise; Vail-Kendall accounts showing legal costs of patents; Vail-Morse correspondence regarding the Morse-Joseph Henry dispute.

Boxes 3-3A

Boxes 3-3A of 9 "Magnetic Telegraph Correspondence, 1847-1858," bound volumes I-VII; incoming and outgoing correspondence, arranged by correspondent and chronologically, relating to Washington and New Orleans Telegraph Company, printed regulations for operation of telegraph stations, tariffs, and correspondence about operational, technical, and business matters; correspondence relating to problems of management and financing; sketches and other information about telegraph lines in Buffalo area in 1849; circulars and replies collecting information about telegraph companies; information concerning telegraph equipment and instruments, especially galvanometers, insulation and insulators, and keys. Volumes I-V are in box 3; Volumes VI-VII are in box 3A.

Box 4

Box 4 of 9 Correspondence regarding telegraph rates, 1848-1851, 2 bound volumes; incoming and outgoing correspondence arranged by correspondent or telegraph line and chronologically; comprise returns from 1849 circular sent out by Vail collecting information for published tables of rates of charges of each telegraph company in the United States and Canada.

Box 4 of 9 Publication Correspondence, 1845-1848, 1 bound volume; incoming and outgoing correspondence, arranged by correspondent and chronologically; mostly correspondence between Vail, his publishers, and those persons selling his publications; very little relating to substantive matters of the publications.

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Series 2: ALFRED VAIL DIARIES AND RESEARCH NOTEBOOKS.

Box 5

- Box 5 of 9 Miscellaneous Telegraph Papers, 1846-1848, 1 bound volume; includes *The Electromagnetic Telegraph*, copies of proposals for telegraph construction in the District of Columbia area, "Difficulties of telegraphy on the Baltimore and Philadelphia Line, 1846," Alfred Vail diary entries regarding telegraph activities in 1848 and 1849; Alfred Vail's recollections in 1848 of Samuel F. B. Morse's 1837-1838 telegraph work; a few telegraph messages, 1845.
- Box 5 of 9 Alfred Vail's Washington, D.C., Diary, 1848, 1 bound volume, includes telegraph business and controversy with Joseph Henry.
[Digital Content: Diary of Alfred Vail, September 8 and 9, 1848 Entries \[Image no. SIA2011-0824\]](#)
- Box 5 of 9 Experiments-Diaries, 1843, 1844, 1843-1845, 1848, 1843-1844, 5 volumes, experiments concerning wiring in lead pipe, electro-magnet, various conductors and nonconductors, including indication of participation of Leonard D. Gale; and telegraph abbreviations.
[Digital Content: Cover of Alfred Vail's Experiment Notebook, c. 1844. \[Image no. SIA2011-0825\]](#)
[Digital Content: Alfred Vail's Electromagnetic Telegraph Notes, 1848. \[Image no. SIA2011-0826\]](#)
[Digital Content: Alfred Vail's Drawing of Many Circuits with One Battery, c. 1844. \[Image no. SIA2011-0827\]](#)
[Digital Content: Drawing of the Electromagnetic Telegraph and Alpha Code, c. 1844 \[Image no. SIA2011-0828\]](#)
[Digital Content: Notes on the Operation of Telegraph Lines, c. 1850. \[Image no. SIA2011-0829\]](#)
[Digital Content: Sketch of Circuits Using One Battery, April 15, 1844. \[Image no. SIA2011-0830\]](#)

Box 5A

- Box 5A of 9 Drawings of telegraph mechanisms, architectural drawings 1844-1850, related to diary entries. Oversize material also removed to map cases.

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Series 3: ALFRED VAIL TELEGRAPH JOURNALS.

Box 6

Box 6 of 9

Alfred Vail Telegraph Journals, 1844-1845, 1848-1851, and correspondence (1848-1851), principally by telegraph.

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Series 4: ALFRED VAIL ACCOUNTS. (Includes oversize)

Box 7

Box 7 of 9

American Electromagnetic Telegraph Pamphlets, Costs, 1845, 1 bound volume; Telegraph Accounts, 1846-1847; old Telegraph Accounts with Amos Kendall, 1846-1848.

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Series 5: ALFRED VAIL MISCELLANEOUS.

Box 7

Box 7 of 9

Copies of contracts, correspondence with Professor Jackson, Sir John Campbell, and others, 1844-1848; copies of articles from technical publications, 1837-1838, extracts of patents, copies of telegraph communications, 1847-1848, records of stock transactions, and records relating to Samuel F. B. Morse-Henry O'Reilly litigation.

Box 7A

Box 7A of 9

Miscellaneous Calculations, Memoranda, 1845-1848, 1 volume, includes copies of some pre-1845 items; accounts with Amos Kendall, G. L. Gideon, and Morse; lists of telegraph lines and tariffs; newsclippings, 1846, manuscript copies of articles from newspapers and technical publications, 1836-1840.

Box 7B

Box 7B of 9

Contract Book, Alfred Vail, 1837-1848, 1 bound volume, copies of contracts and agreements regarding the telegraph enterprise; drawings for *Electro-Magnetic Telegraph*; *Magnetic Telegraph Drawings*, 1844-1849; some drawings of the Speedwell Iron Works. [oversize]

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Series 6: GEORGE VAIL CORRESPONDENCE

Box 8

Box 8 of 9 "Letters of Alfred Vail Relating to the Telegraph," 1837-1855, 1 bound volume; incoming correspondence from Alfred to George Vail, and some outgoing correspondence, relating to Vail's early interest in the telegraph; also, copies of some agreements.

Box 8 of 9 "Some letters of Professor Morse and Amos Kendall Relating to the Telegraph, 1838-1845," 1 volume; mostly incoming correspondence, arranged by correspondent and chronologically; includes early correspondence between Samuel F. B. Morse and George Vail concerning financial support of the telegraph enterprise; letter from Kendall concerning detailed accounts of stock sales.

Box 9

Box 9 of 9 "Miscellaneous Business Letters and Paper Relating to the Telegraph, 1848-1858," 1 volume.

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Series 7: AMANDA VAIL, CORRESPONDENCE AND COLLECTED INFORMATION.

Box 9

Box 9 of 9

Correspondence and Scrapbook, 1846-1848, 1 volume; concerning Alfred Vail's role in telegraph development; correspondence and notes, 1862-1893, 1 folder; printed correspondence, 1845-1847, between Kendall and O'Reilly; L. D. Case Correspondence, 1871-1872, 1881-1882; concerns history of the telegraph; correspondents include Leonard D. Gale, Samuel F. B. Morse, Henry O'Reilly, Francis O. J. Smith, and William B. Taylor.

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Series 8: PUBLICATIONS, PHOTOGRAPHS.

Box 9

Box 9 of 9

Smith, *The Secret Corresponding Vocabulary*, 1845; Alfred Vail, *Register of the Electro-Magnetic Telegraph Companies*, 1849 (2 copies); William Baxter, *The Real Birth of the Electric Telegraph*; sketch of Smith by Morse; photograph of unidentified instrument; photographic copies of Magnetic Telegraph Company's printed rates, and other documents.

Box 9A

Box 9A of 9

Affidavits of L. D. Gale, S. F. B. Morse, Amos Kendall in suit v. Henry O'Reilly and others, 1848.

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Series 9: SCRAPBOOKS KEPT BY ALFRED AND AMANDA VAIL. Oversize.

Alfred Vail, 1844-1849, 2 volumes, index; Telegraph Scraps, 1853-1858, 1 volume; Scrapbook of Telegraph, 1856-1858, 1896, 1912.

Box 9B

Box 9B of 9 Scrapbook, Vol. I

Box 9C

Box 9C of 9 Scrapbook, Vol. II

Box 9D

Box 9D of 9 Telegraph Scraps

Box 9E

Box 9E of 9 Scrapbook of Telegraph

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Series 10: ADDITIONS TO PAPERS

Box 10

Added accessions 81-008, 84-091

- Box 10 of 9 Folder 1 George C. Maynard Envelope
- Box 10 of 9 Folder 2 Correspondence, circa 1848-1917. Includes copies of correspondence with Alfred Vail family, inter-National Museum correspondence regarding Vail holdings and accession listings.
- Box 10 of 9 Folder 3 Stephen Vail and Amanda Vail correspondence, primarily with J. Elfreth Watkins, 1891-1892. Includes newspaper clipping, 1912; pamphlet on the history of the telegraph; and an unidentified photograph.
- Box 10 of 9 Folder 4 J. C. Vail research materials, 1913. Includes copies of photographs of Samuel Morse and the Morse telegraph.
- Box 10 of 9 Folder 5 Pamphlets, correspondence, and photograph. Includes historical materials concerning the Morse telegraph and the Alfred Vail family.
- Box 10 of 9 Folder 6 Newspaper Clippings (loose) and Kendall Vail correspondence. Accession 84-091.
- Box 10 of 9 Folder 7 Stephen Vail: "The Electro-Magnetic Telegraph: Its Birth and Infancy." Accession 84-091.

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