

# George F. Becker Papers

A Finding Aid to the Collection in the  
Library of Congress

Prepared by Manuscript Division Staff



Manuscript Division, Library of  
Congress

Washington, D.C.

2009

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# Collection Summary

Title: George F. Becker Papers

Span Dates: 1814-1928

Bulk Dates: (bulk 1870-1919)

ID No.: MSS12229

Creator: Becker, George F. (George Ferdinand), 1847-1919

Extent: 9,900 items; 36 containers plus 1 oversize; 14.5 linear feet

Language: Collection material in English with Spanish and German

Repository: Manuscript Division, Library of Congress, Washington, D.C.

Abstract: Geologist, mathematician, engineer, and physicist. Correspondence, diaries, letterbooks, notebooks, notes, memoranda, maps, charts, tables, landscape sketches, and printed matter primarily relating to Becker's service at the United States Geological Survey, Carnegie Institution of Washington, and as president of the Geological Society of America.

## Selected Search Terms

The following terms have been used to index the description of this collection in the Library's online catalog. They are grouped by name of person or organization, by subject or location, and by occupation and listed alphabetically therein.

### People

Arzruni, Andreas, 1847-1898--Correspondence.

Becker family.

Becker, George F. (George Ferdinand), 1847-1919.

Bell, James Franklin, 1856-1919--Correspondence.

Burton, Theodore E. (Theodore Elijah), 1851-1929--Correspondence.

Crozier, William, 1855-1942--Correspondence.

Dana, Edward Salisbury, 1849-1935--Correspondence.

Dana, James Dwight, 1813-1895--Correspondence.

Emmons, Samuel Franklin, 1841-1911--Correspondence.

Geikie, Archibald, 1835-1924--Correspondence.

Hague, A. (Arnold), 1840-1917--Correspondence.

Hilgard, Eugene W. (Eugene Woldemar), 1833-1916--Correspondence.

Hovey, Edmund Otis, 1862-1924--Correspondence.

Howe, Henry Marion, 1848-1922--Correspondence.

Janin, Louis, 1837-1914--Correspondence.

Lindgren, Waldemar, 1860-1939--Correspondence.

Merrill, Charles Washington, 1869-1956--Correspondence.

Newcomb, Simon, 1835-1909--Correspondence.

Peirce, Charles S. (Charles Sanders), 1839-1914--Correspondence.

Purington, Chester Wells, b. 1871--Correspondence.

Roosevelt, Theodore, 1858-1919--Correspondence.

Turner, H. W. (Henry Ward), b. 1857--Correspondence.

Walcott, Charles D. (Charles Doolittle), 1850-1927--Correspondence.

Woodward, Robert Simpson, 1849-1924--Correspondence.

### Organizations

Carnegie Institution of Washington.

Geological Society of America.

Geological Survey (U.S.)

Radioactivity Congress (1910 : Brussels, Belgium)

### Subjects

Geology--Alaska.

Geology--Nevada.  
Geology--North America.  
Geology--Pacific Coast (America)  
Geology--Philippines.  
Geology--South Africa.  
Geology--United States--Societies, etc.  
Geology--United States.  
Geophysics.  
Radioactivity--Congresses.  
  
Occupations  
Geologists.  
Mathematicians.  
Physicists.  
Scientists.

## Administrative Information

### Provenance

The papers of George F. Becker, geologist, mathematician, engineer, and physicist were given to the Library of Congress by his wife Florence Deakins Becker from 1952 to 1954. The first accession was transferred from the United States Geological Survey where Mrs. Becker had originally placed it. A bound volume was received as a gift from C. A. Elliott, Harvard University Archives, Cambridge, Mass., in 1992.

### Processing History

The papers of George F. Becker were arranged and described circa 1954. The collection was expanded and the finding aid revised in 2009.

### Additional Guides

A brief report on the George F. Becker Papers appeared in the Library's *Information Bulletin*, March 22, 1954 (vol. 13, no. 12). The papers were reported also in the Manuscripts Division's annual report of acquisitions, *Library of Congress Quarterly Journal of Current Acquisitions*, May, 1954 (vol. 11, no. 3); and in *Library of Congress Acquisitions: Manuscript Division*, 1992.

### Transfers

Photographs and photograph albums have been transferred to the Prints and Photographs Division where they are identified as part of the George F. Becker Papers.

### Copyright Status

Copyright in the unpublished writings of George F. Becker in these papers and in other collections of papers in the custody of the Library of Congress has been dedicated to the public.

### Access and Restrictions

The papers of George F. Becker are open to research. Researchers are advised to contact the Manuscript Reading Room prior to visiting. Many collections are stored off-site and advance notice is needed to retrieve these items for research use.

### Preferred Citation

Researchers wishing to cite this collection should include the following information: Container number, George F. Becker Papers, Manuscript Division, Library of Congress, Washington, D.C.

## Biographical Note

<i>Date</i>	<i>Event</i>
1847, Jan. 5	Born, New York, N.Y.
1866	Married Sarah M. Barnes (divorced 1879)
1868	B.A., Harvard University, Cambridge, Mass.
1869	Ph.D., University of Heidelberg, Heidelberg, Germany
1869-1870	Reporter, New York <i>Herald Tribune</i> , during the Franco-Prussian War
1870	Received "Certificate as a Practical Puddler" from Royal Iron Works in Germany
1871	Mining engineer degree, Royal Academy of Mines, Berlin, Germany
1872-1873	Construction engineer, Joliet Iron and Steel Co., Joliet, Ill.
1874-1879	Instructor in mining and metallurgy, University of California, Berkeley, Calif.
1879	Married Alice Theodora ("Elsie") Watson (died 1880)
1880-1882	Surveyed Comstock Lode
1880-1883	Special agent for Tenth United States Census
1880-1891	Geologist-in-charge, United States Geological Survey
1883-1888	Investigated quicksilver deposits of the Pacific slope
1892	Began first studies of deforming effects of great pressures
1895	Investigated gold fields of southern Alaska
1895-1919	Geologist-in-charge, United States Geological Survey
1896	Examined gold and diamond mines in South Africa
1898	Geophysicist, United States Geological Survey
1898-1899	Detailed to serve as geologist with the United States Army, Philippine Islands
1902	At request of President Theodore Roosevelt appointed to prepare a report on the desirability of instituting scientific exploration of the Philippine Islands Married Florence Serpell Deakins
1904	Lectured on "How Small an Army We Need"
1910	Represented United States at Radioactivity Congress, Brussels, Belgium

1914                      President, Geological Society of America  
1919, Apr. 20            Died, Washington, D.C.

## Scope and Content Note

The papers of George Ferdinand Becker (1847-1919) span the years 1814-1928, with the bulk of the items dating from 1870 to 1919. The papers primarily relate to Becker's service as geologist-in-charge of the United States Geological Survey during which time he conducted investigations in Nevada, southern Alaska, South Africa, the Pacific slope, and the Philippines as well as his service as the geophysicist of the Carnegie Institution of Washington, and as the United States representative to the Radioactivity Congress in Brussels, Belgium. Mostly in English with Spanish and German, the papers are organized into the following series: [Family Correspondence](#); [General Correspondence](#); [Letterbooks](#); [Subject File](#); [Biographical File](#); [Blueprints, Maps, and Sketches](#); [Addition](#); and [Oversize](#).

The [Family Correspondence](#) consists mainly of letters exchanged between Becker, his mother Sarah Cary Tuckerman Becker, and wives Alice Theodora ("Elsie") Watson Becker and Florence Serpell Deakins Becker. A separate group of early family letters includes the correspondence of Joseph Tuckerman, Becker's grandfather, and other members of the family with literary and scientific figures of the time. Letters for the years 1834-1838 contain references to literary figures Harriet Martineau with whom Sarah Cary Tuckerman Becker traveled and William Ellery Channing.

The [General Correspondence](#) and [Letterbooks](#) contain Becker's correspondence from about 1857 to his death and document his service as geologist-in-charge for the United States Geological Survey. Correspondents include Andreas Arzruni, James Franklin Bell, Theodore E. Burton, Willilam Crozier, Edward Salisbury Dana, James Dwight Dana, Samuel Franklin Emmons, Archibald Geikie, Arnold Hague, Eugene W. Hilgard, Edmund Otis Hovey, Henry Marion Howe, Louis Janin, Waldemar Lindgren, Charles Washington Merrill, Simon Newcomb, Charles S. Peirce, Chester W. Purington, Theodore Roosevelt, Henry Ward Turner, Charles D. Walcott, and Robert Simpson Woodward. The [Letterbooks](#) are legible except for one, but are in poor chronological arrangement and contain an incomplete index with each volume.

The [Subject File](#) relates to Becker's work on Panama Canal landslides, and the gold fields of South Africa, California, and southern Alaska. A large number of the files document Becker's work in the Philippine Islands where he served as the geologist for the United States Army and was later appointed to prepare a report on the desirability of scientific exploration in the area.

The [Biographical File](#) is largely comprised of the diaries, journals, and personal notebooks of Alice Theodora ("Elsie") Watson Becker, Sarah Cary Tuckerman Becker, Andrew C. Becker, and Becker himself. Included also are biographical sketches of Becker, his obituary notices, his school essays and notebooks, and folders on other family members.

The collection is rounded out by the [Blueprints, Maps, and Sketches](#) series with printed maps and blueprints relating to Becker's career as well as a large number of sketches of landscapes and interiors, by an [Addition](#) containing the 1902 book *Geophysics* with handwritten margin notes by Becker, and [Oversize](#) largely comprised of maps and certificates.

## Arrangement of the Papers

This collection is arranged in eight series:

- [Family Correspondence, 1814-1919](#)
- [General Correspondence, 1857-1928](#)

- Letterbooks, 1872-1887
- Subject File, circa 1852-circa 1905
- Biographical File, 1824-1919
- Blueprints, Maps, and Sketches, 1839-1912
- Addition, 1902
- Oversize, 1841-1914

## Description of Series

<i>Container</i>	<i>Series</i>
BOX 1-14	<u>Family Correspondence, 1814-1919</u> Letters sent and received. Arranged either chronologically or by name of family member and therein chronologically.
BOX 15-21	<u>General Correspondence, 1857-1928</u> Letters sent and received. Arranged chronologically with Theodore Roosevelt correspondence filed at the end of the series.
BOX 22	<u>Letterbooks, 1872-1887</u> Letterpress copies of letters sent. Arranged chronologically. Illegible letters are filed at the end of the series.
BOX 23-30	<u>Subject File, circa 1852-circa 1905</u> Memoranda, reports, articles, print and near-print matter, notes and notebooks, charts, and tables. Arranged alphabetically by subject and therein by topic or type of material.
BOX 31-34	<u>Biographical File, 1824-1919</u> Biographical sketches, diaries, journals, notebooks, memoranda, school essays, memorabilia, and obituary notices. Arranged by name of person or type of material.
BOX 35	<u>Blueprints, Maps, and Sketches, 1839-1912</u> Printed maps, blueprints, loose sketches, and sketch books. Arranged by type of material.
BOX 35	<u>Addition, 1902</u> Book entitled <i>Geophysics</i> with handwritten margin notes by Becker.
BOX OV 1	<u>Oversize, 1841-1914</u> Certificates, maps, photostatic copies, and a chart. Arranged and described according to the box and folder from which the items were removed.

# Container List

<i>Container</i>	<i>Contents</i>
BOX 1-14	Family Correspondence, 1814-1919 Letters sent and received. Arranged either chronologically or by name of family member and therein chronologically.
BOX 1	Chronological
BOX 1	1814-1840
BOX 2	1841-1875
BOX 3	1876-1919, undated
BOX 4	Becker to Sarah Cary Tuckerman Becker
BOX 4	1852-1869
BOX 5	1871-1890
BOX 6	1891-1901
BOX 7	Sarah Cary Tuckerman Becker to Becker
BOX 7	1859-1873
BOX 8	1874-1880
BOX 9	1881-1884
BOX 10	1885-1890
BOX 11	1891-1896
BOX 12	1897-1900
BOX 13	Becker and Alice Theodora ("Elsie") Watson Becker, 1873-1880, undated
BOX 14	Becker to Florence Serpell Deakins Becker, 1901-1918
BOX 15-21	General Correspondence, 1857-1928 Letters sent and received. Arranged chronologically with Theodore Roosevelt correspondence filed at the end of the series.
BOX 15	Chronological file
BOX 15	1857-1884
BOX 16	1885-1895
BOX 17	1896-1900
BOX 18	1901-1907
BOX 19	1908-1915
BOX 20	1916-1928
BOX 21	Roosevelt, Theodore, 1900-1905, undated
BOX 22	Letterbooks, 1872-1887 Letterpress copies of letters sent. Arranged chronologically. Illegible letters are filed at the end of the series.
BOX 22	1872-1879
BOX 22	1882-1887

Letterbooks, 1872-1887

*Container*

*Contents*

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BOX 22	Illegible
BOX 23-30	Subject File, circa 1852-circa 1905 Memoranda, reports, articles, print and near-print matter, notes and notebooks, charts, and tables. Arranged alphabetically by subject and therein by topic or type of material.
BOX 23	Art, literature, and poetry
BOX 23	Bibliography of Becker's writings
BOX 23	Biographical sketches of other persons
BOX 23	Education
BOX 23	Fire-fighting equipment
BOX 23	History
BOX 23	California
BOX 23	Bear Flag War
BOX 23	Occupation
BOX 23	Kearny, Stephen Watts, and John C. Frémont
BOX 23	Gold
BOX 23	"The Hounds"
BOX 23	"Windred and Burdue"
BOX 23	Vigilantes
BOX 23	Assassination of James King
BOX 23	Execution of J. P. Casey
BOX 23	Arrest of Judge David S. Terry
BOX 23	Closing of Vigilance Committee
BOX 23	Europe and Asia
BOX 23	South Africa, including photographs of John Hays Hammond
BOX 23	Taft, William H., Administration
BOX 23	Labor views, "The Responsibility of Labor"
BOX 23	Military views, "How Small an Army We Need"
BOX 23	Miscellaneous, 1905, undated <i><u>See also Oversize</u></i>
BOX 23	Musical scale
BOX 23	Panama Canal
BOX 23	"Bulging of Canal Bottom"
BOX 23	Earthquakes and Panama Canal
BOX 23	Examples of slide curves
BOX 23	Landslides of Gaillard Out
BOX 23	Mechanics of Panama Canal slides
BOX 23	Notes on Panama Canal report
BOX 23	Report on possibility of controlling slides
BOX 24	Philippine Islands
BOX 24	"Agriculture in the Philippines"
BOX 24	Bibliography of Philippine Islands (geological)
BOX 24	Cedulas (licences)
BOX 24	Currency
BOX 24	Disciplinary batallion, 1871
BOX 24	Geognosy study of Philippines

Subject File, circa 1852-circa 1905

<i>Container</i>	<i>Contents</i>
BOX 24	Memoranda, articles, and notes, 1898-1899, undated (11 folders)
BOX 24	Meteorology data (tides, weather, stations)
BOX 24	Miscellaneous printed matter
BOX 24	Correspondence 1898-1900 (3 folders)
BOX 24A	Newspaper clippings (13 folders)
BOX 25	Newspaper, Manila, Philippines, letters and comments published in, 1898-1899
BOX 25	Proclamation, manifestos, and programs, 1897-1899
BOX 25	"Published Papers by George F. Becker," 1898-1900
BOX 25	Report of Philippine Commission, 1902
BOX 25	Scientific study of the Philippine Islands
BOX 25	United States Army, roster of troops in the Philippines, 1898, Sept.
BOX 25	Philosophy
BOX 25	Science
BOX 25	Agassiz plates, "Bahamas"
BOX 25	Astrophysics
BOX 25	Capillary tubes
BOX 25	Chemical analysis
BOX 25	Constants
BOX 26	<i>Cosmopolitan</i> , articles, 1893-1896
BOX 26	Diffusion and specific gravity
BOX 26	Earth (age, origin, and composition)
BOX 26	Ellipsoids
BOX 26	Geophysics
BOX 26	"Grand Canyon," article on visit
BOX 26	Institutions for scientific research in chemistry, geophysics and physics
BOX 26	"Linear Force of Growing Crystals"
BOX 26	Magnetic disturbances and the genesis of petroleum
BOX 26	Mathematical notes and problems
BOX 26	Matter, density, and mass
BOX 26	Mechanical quadratures
BOX 26	Meteorology, "Origin of United States Weather Bureau"
BOX 27	Mineralogy
BOX 27	Gold
BOX 27	Gold fields of Alaska
BOX 27	Gold fields of California, 1891, June-1897, Aug., undated (2 folders)
BOX 27	Gold fields of South Africa
BOX 27	Iron
BOX 27	Mercury (cinnabar)
BOX 27	Miscellaneous minerals
BOX 27	Silver
BOX 28	Miscellaneous notes
BOX 28	Notebooks

Subject File, circa 1852-circa 1905

<i>Container</i>	<i>Contents</i>
BOX 28	Nos. 1-17
BOX 29	Nos. 18-30
BOX 29	Propulsion
BOX 29	Radioactive substances
BOX 29	Reflecting rangefinder
BOX 29	Rotation and attraction
BOX 29	Seismology
BOX 30	Strains, cleavage, and rock formations
BOX 30	"Stumpage Table for Yellow Pine"
BOX 30	Temperatures
BOX 30	United States Geological Survey
BOX 30	Vibrations
BOX 30	Volcanic activity
BOX 30	"Vulcanized India Rubber"
BOX 30	"Water as an Obstacle to Erosion"
BOX 31-34	Biographical File, 1824-1919 Biographical sketches, diaries, journals, notebooks, memoranda, school essays, memorabilia, and obituary notices. Arranged by name of person or type of material.
BOX 31	Commissions, certificates, and identification cards, 1829, 1841, 1868-1887, 1893-1917, undated <i><u>See also Oversize</u></i>
BOX 31	Diaries, journals, and personal notebooks
BOX 31	Becker, Alice Theodora ("Elsie") Watson
BOX 31	1872
BOX 31	1874
BOX 31	1879-1880
BOX 31	1880
BOX 31	Becker, Andrew C., 1830
BOX 31	Becker, George F.
BOX 31	1858-1859
BOX 31	1861-1865
BOX 31	1879
	(1 folder)
BOX 32	(1 folder)
BOX 32	1892
BOX 32	1897-1900
BOX 32	Undated
BOX 32	Becker, Sarah Cary Tuckerman
BOX 32	1824
BOX 32	1836, Aug.-Sept.
BOX 32	1836, Oct.-Dec.
BOX 32	1839, Dec.-1837, Feb.
BOX 32	1837, Feb.-Apr.
BOX 32	1868-1871
BOX 32	1875-1879

# Biographical File, 1824-1919

## Container

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BOX 32	1894-1898
BOX 33	Family miscellany
BOX 33	<i>The Life of Sir John Falstaff</i> , inscribed by S. C. Becker, 1859
BOX 33	Becker, Alice Theodora ("Elsie") Watson
BOX 33	Becker, Andrew C.
BOX 33	Becker, Samuel D.
BOX 33	Becker, George F.
BOX 33	Biographical sketches
BOX 33	Graduate studies in Germany
BOX 33	Harvard University, Cambridge, Mass.
BOX 33	Memorabilia
BOX 33	Obituary notices, 1919
BOX 33	School essays
BOX 33	1855-1865
BOX 34	Undated
	(3 folders)
BOX 34	School notebooks, 1857-1858, 1868, undated
	(3 folders)
BOX 34	Becker, Sarah Cary Tuckerman
BOX 34	Tuckerman, Joseph
BOX 35	Blueprints, Maps, and Sketches, 1839-1912
	Printed maps, blueprints, loose sketches, and sketch books.
	Arranged by type of material.
BOX 35	Blueprints, 1896, undated
BOX 35	Catalogue of drawings, 1859-1863
BOX 35	Maps, 1889-1899, 1908-1912, undated <i><u>See Oversize</u></i>
BOX 35	Sketch books, 1878, undated
BOX 35	Sketches, 1839-1844, 1856, 1873-1878, 1895, undated
	(2 folders)
BOX 35	Addition, 1902
	Book entitled <i>Geophysics</i> with handwritten margin notes by Becker.
BOX 35	<i>Geophysics</i> , 1902
BOX OV 1	Oversize, 1841-1914
	Certificates, maps, photostatic copies, and a chart.
	Arranged and described according to the box and folder from which the items were removed.
BOX OV 1	Subject File
BOX OV 1	Miscellaneous
BOX OV 1	Chart of experiments, 1905 (Container 23)
BOX OV 1	Photostatic copies of drawings, undated (Container 23)
BOX OV 1	Biographical File

Oversize, 1841-1914

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BOX OV 1	Commissions, certificates, and identification cards, 1841, 1868-1870, 1887, 1896-1914 (Container 31)
BOX OV 1	Blueprints, Maps, and Sketches
BOX OV 1	Maps, 1889-1899, 1908-1912, undated (Container 35)