## Louis Agricola Bauer Papers, 1892-1939



Carnegie Institution of Washington Department of Terrestrial Magnetism Archives Washington, DC

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# Louis Agricola Bauer Papers, 1892-1939

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## Louis Agricola Bauer Papers, 1892-1939 DTM-2004-01

#### Introduction

Abstract: This collection consists of the personal papers of Louis Agricola Bauer. Bauer was the first director of the Carnegie Institution's Department of Terrestrial Magnetism, from 1904-1929. His greatest achievement was the organization and direction of extensive programs for the observation of earth's magnetic field.

Extent: 7 linear feet: 2 document boxes, 7 flat storage boxes, 4 binder boxes and two negative boxes

*Acquisition:* This collection was donated by L.A. Bauer's granddaughter, Lucy Pirtle, in May 1992. Other materials collected by the Department of Terrestrial Magnetism were incorporated into the collection as it was processed.

Access Restriction: There are no access restrictions to this collection.

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*Preferred Citation:* Louis Agricola Bauer Papers, 1892-1939, Department of Terrestrial Magnetism, Carnegie Institution of Washington, Washington, D.C.

*Processing:* Processing completed by Jennifer Snyder in March 2004. Original order was not maintained in the processing of this collection. Newsprint articles were photocopied onto acid-free paper and the originals were discarded.

Kara Friend rehoused albums, prints and negatives into appropriate enclosures in June 2004. The prints and negatives were rehoused and the original annotated envelopes were saved as a reference file.

This collection was processed through the generous support of the National Historical Publications and Records Commission.

#### L.A. Bauer Biographical Sketch

Louis Agricola Bauer was the first director of the Carnegie Institution's Department of Terrestrial Magnetism, from 1904-1929. He was born 26 January 1865 in Cincinnati, Ohio, and died 12 April 1932 in Washington, D.C.

The following is excerpted from Gregory A. Good's entry on Bauer in the *American National Biography*.

Born with no middle name, he jokingly conferred on himself (Agricola is a Latin translation of Bauer, "farmer").... He married Adelia Frances Doolittle in 1891 and they had one child [Dorothea Louise Bauer].

Bauer studied civil engineering at the University of Cincinnati, earning his C.E. in 1888. While an aide at the U.S. Coast and Geodetic Survey he began his transition into science. [He] learned practical aspects of geomagnetism, including use of instruments and reduction of data.... As did other American scientists, Bauer went next to Germany, where he earned a Ph.D. at the University of Berlin in 1895. He studies theoretical topics in physics and geophysics with well-known scientists, including Max Planck, Wilhelm von Bezold, and Wilhelm Foerster. These scientists served as examiners for Bauer's dissertation on the secular variation of geomagnetism, the slow change in the direction and intensity of earth's magnetism. In 1893 he met the influential magnetician Adolph Schmidt, and they began a long collaboration....

Bauer returned to the United States with a life's goal: to raise the study of earth's magnetism to the status enjoyed by other areas in the physical and earth sciences. He moved steadily and imaginatively toward this goal for thirty years....

Bauer's greatest achievement was the organization and direction of extensive programs for the observation of earth's magnetic field....

In 1899 Bauer shifted from university employment to the USCGS to concentrate on research.... As the first chief of a new Division of Terrestrial Magnetism, Bauer developed a full geomagnetic survey of the country and greatly expanded and reorganized the series of observatories for studying the temporal changes in earth's magnetism. In both these activities Bauer saw his task as keeping the United States at the highest international standard. Bauer also began a program of geomagnetic measurements on USCGS steamships.

Bauer extrapolated these three basic activities to an international scale after joining the Carnegie Institution of Washington (CIW) in 1904. He had concluded that no physical theory of earth's magnetism could be developed or tested until the magnetic elements had been mapped precisely over a significant portion of earth's surface, including the oceans, over a comparatively short period of time. The endorsement of the project by the CIW enabled Bauer to pursue his dream vigorously. Between 1905 and 1921, his Department of Terrestrial Magnetism sponsored 130 expeditions to remote parts of the globe, and its two ships, the *Galilee* and the nonmagnetic yacht the *Carnegie*, sailed many times around the globe measuring the magnetic elements....

Bauer's international efforts were not restricted to expeditionary science. He also organized and edited the journal *Terrestrial Magnetism* (now the *Journal of Geophysical Research*) from 1896 until the 1920s....Bauer viewed the *Journal* as a means of communication for an emerging specialty and as a means of building a sense of community among researchers of magnetism.

He published over 300 articles and monographs.

Bauer had a strong sense of mission and obligation to his cause. He was noted for his efficiency and for his intolerance of imprecision among his subordinates. Although he delegated responsibility, he also controlled closely the lines of research at DTM. He was described by colleagues as fiery, dynamic, and enthusiastic.

## **Scope and Content**

This collection consists of the personal papers of Louis Agricola Bauer and serves to illuminate both his personal and professional lives while he was an employee of the Carnegie Institution of Washington.

#### Arrangement

This collection consists of three document boxes, one flat letter size box, and two oversize flat boxes. The materials are arranged in 6 series.

Series 1: Biographical Materials, 1910-1937, n.d.

Series 2: Correspondence, 1892-1939, n.d.

Series 3: Expedition Related Materials, 1900-1922, n.d.

Series 4: Carnegie Institution Materials, 1909-1938, n.d.

Series 5: Ephemera, 1902-1939, n.d.

Series 6: Miscellaneous, 1885, 1922, n.d.

## Series 1: Biographical Materials, 1910-1937, n.d.

This series consists of items about Bauer's life, including biographical sketches, news clippings about him and his professional career, his school diplomas, and photographs of him and his family. Of particular note is a scrapbook created and donated by Dorothea Bauer to the Department of Terrestrial Magnetism in 1965.

#### Series 2: Correspondence, 1892-1939, n.d.

This series consists of correspondence to Bauer from colleagues and family members. Also included is correspondence from Bauer to his wife and child on his various expeditions and travels. There is also correspondence between the Mrs. Bauer and others after L.A. Bauer's death.

#### Series 3: Expedition Related Materials, 1900-1922, n.d.

This series consists of Bauer's notes from various locales, mostly in 1911. Of interest is the ephemera he collected while traveling. Ephemera collected during the solar eclipse expedition in 1919 were mounted in a scrapbook along with a few duplicate photographs also found in the solar eclipse expedition photograph album.

Over the years the images were assigned various numbering schemes. Solar eclipse expedition images are labeled B###. Expedition images from 1911 and 1913 were labeled ###B. However, numbers 216B-265B were used twice. When the collection was rehoused the appropriate year was added in parentheticals to distinguish between the two sets of images. The images from the trip to Italy and Bombay were numbered BB##. The images found in albums titled "Views..."

were numbered BC### where once again numbers were used twice. The images were annotated with either 1919 or 1921 in parentheticals as appropriate. Images BC001 (1921) through BC103 (1921) are found in both albums 6 and the second half of album 5.

## Series 4: Carnegie Institution Materials, 1909-1938, n.d.

This series consists of material relating to the Carnegie Institution of Washington. Photographs of the *Galilee* and *Carnegie* are found here. Information about the *Carnegie* ship makes up the bulk of this series. Also included are photographs of CIW staff, programs from events held by CIW, and examples of stationery used by the Institution.

## Series 5: Ephemera, 1902-1939, n.d.

News clippings about various subjects and people (including the *Carnegie* ship accident) make up the bulk of this series. Also included here are copies of articles and lectures by others. A few artistic pieces related are located in this series, as well.

#### Series 6: Miscellaneous, 1885, 1922, n.d.

This series is made up of miscellaneous materials including a photograph album from a 1922 trip, unidentified photographs of people and portraits of scientists, University of Cincinnati fundraising correspondence, mailing lists, etc.

## **Folder Listing**

	<b>Box</b>	<u>Folder</u>
Series 1: Biographical Materials, 1910-1937, n.d.		
Biographical information [Biographical sketches, memorial programs,	1	1
Mrs. Bauer's unfinished biography of her husband.], 1909, 1924,		
1925, 1932, n.d.		
Diplomas, honorary degrees, and certificates [Also includes Bauer's	6	1
passport], 1899, 1906, 1908, 1909, 1922, n.d.		
News clippings about Bauer, 1910-1916, 1921-1923, 1929, n.d.	1	2
News clippings about Bauer, 1909, 1911, 1920, 1922, n.d.	6	2
Photographs: Portraits of Bauer, n.d.	3	1-2
Photograph: Portrait of Bauer, n.d.	6	3
Photographs: Bauer in field or casual, 1911, 1921, 1922, n.d.	3	3
Family Memorabilia [Calling cards and poem from niece.], n.d.	1	3
Photographs: Bauer family [Including Bauer's mother and brother.],	3	4
1911, 1922, 1937, n.d.		
Photographs of Bauer family, n.d.	6	3
Presentation of Bauer's portrait to the Department of Terrestrial	1	4
Magnetism, 3 April 1937		
Memberships to clubs and professional organizations, 1890, 1904,	1	5
1911, 1927, n.d.		
Announcements of speaking engagements, 1919, 1921, 1922, 1925,	1	6
1927, n.d.		
Bauer's lectures and articles, 1895, 1909, 1911, 1919, 1937	1	7
Bauer's lectures and articles, 1908, 1910, ca. 1916	6	4
Meeting minutes and notices, 1907, 1912, 1926	1	8

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Scrapbook [Created by Dorothea Bauer. Includes photographs, remembrances, and copies of letters.], 1895-1932	<b>Box</b> 5	Folder 1-3
Series 2: Correspondence, 1893-1939, n.d.		
Scrapbook of Correspondence, 1893-1895	1	9
Scrapbook of Correspondence, 1893-1895	1	10
Correspondence, 1892	1	11
Correspondence, 1893	1	12
Correspondence, 1894	1	13
Correspondence, 1895	1	14
Correspondence, 1902, 1904, 1905, 1907, 1909	1	15
Correspondence, 1910, 1911, 1913, 1914, 1917, 1919	1	16
Correspondence, 1920-1929	1	17
Correspondence, 1930, 1936, 1938, 1939	1	18
Correspondence [Miscellaneous pages from a scrapbook.], 1923	5	4
Correspondence: letters from Bauer to his wife and child, 1909	1	19
Correspondence: letters from Bauer to his wife and child, [Includes	2	1
Everlasting Silver Leaves, featuring painting of Carnegie, from		
Table Mountain, Cape Town, South Africa], 1911		
Correspondence: letters from Bauer to his wife and children, 1915, 1919, 1921	2	2
Correspondence: Bauer's mother's last letter to him, 14 March 1912	2	3
Miscellaneous pieces of correspondence and envelopes, 1902, 1921-1929, n.d.	2	4
Source 2. Error didion Deleted Meteoricle 1000 1022 m d		
Series 3: Expedition Related Materials, 1900-1922, n.d.	2	5
Bauer's expedition notes, 1911 Bauer's expedition notes, 1911	2 2	6
Colombo [Sri Lanka], n.d.	P-4	O
Eclipse Expedition List of Views [Photograph captions], May 1919	2	7
Expedition Photograph Album: L.A.B. 1B-265B, 1911, 1913	A-3	_
Expedition Photograph Negatives, 1911, 1913	SN-2	_
Expedition Photograph Prints, 1911, 1913	P-2	_
Maps, 1919, 1924, n.d.	6	5
Notes of Automobile Trip in Flanders, 30 July 1919	2	8
Notes on landing in Samoa, April-May, 1911	2	9
Photographs of Samoa [?], 1908, 1910, 1911	3	5
Photographs from the field [Native people, land, etc.], 1911, 1922, n.		6
Photographs of India, 1912	4	1
Solar Eclipse Expedition Photograph Album B1-B290, May 1919	A-1	_
Solar Eclipse Expedition Photograph Negatives, May 1919	SN-1	_
Solar Eclipse Expedition Photograph Prints, May 1919	P-1	_
Solar Eclipse Expedition Scrapbook, May 1919	A-2	-
Stromboli [Italy and] Bombay [India], n.d.	P-4	
Sydney to Wellington [Australia], n.d.	P-4	

Tahiti, n.d. Transcontinental Trip Perth – Adelaide, n.d. [Treadwell] Photograph Prints, 1907 [Treadwell] Photograph Negatives, 1907	Box P-4 P-4 P-3 SN-3	<u>Folder</u>
Trip to Italy and Bombay via Suez Canal Photograph Album BB1-100, Mar-Jun 1922	A-4	-
Trip to Italy and Bombay via Suez Canal Photograph Negatives BB1-72, Mar-Jun 1922	SN-3	-
Trip to Italy and Bombay via Suez Canal Photograph Prints BB1-72, Mar-Jun 1922	P-3	
Views: Washington to Panama Photograph Album, BC1-BC103, Oct- Nov 1921	A-6	-
Views of the <i>Carnegie</i> 's Recent Cruises Photograph Album BC1-BC120, 1919-1921	A-5	-
Views of the <i>Carnegie</i> 's Recent Cruises Photograph Negatives, 1919 Views of the <i>Carnegie</i> 's Recent Cruises Photograph Prints BC1-120, 1919	SN-3 P-3	-
Watheroo [Australia], n.d.	P-4	
Miscellaneous expedition notes, n.d.	2	10
Ephemera from travels, 1900-1919, n.d.	2	11
Series 4: Carnegie Institution Materials, 1909-1938, n.d.		
Carnegie Institution of Washington descriptive pamphlets and exhibition pamphlets, 1909, 1911, 1927, 1929, 1938	2	12
Carnegie ship launch [News articles, photographs, invitations, plates from publications, and Mrs. Bauer's written remembrance.], 1909	2	13
Photographs of the <i>Galilee</i> and <i>Carnegie</i> , 1910, 1921, n.d.	4	2
Picture of the <i>Carnegie</i> from a calendar, February 1922	6	5
Photographs from a reception given in honor or Captain Ault, n.d.	4	3
Photographs of CIW and DTM buildings and staff, 1923, 1940, n.d.	4	4
Prints of Carnegie staff, n.d.	2	14
Stationery examples, n.d.	2	15
C : 7 E   1002 1020		
Series 5: Ephemera, 1902-1939, n.d.  News clippings [People, science, CIW, <i>Carnegie</i> accident, etc.], 1902, 1904, 1911, 1918, 1922, 1926, 1928, 1929, n.d.	2	16
News clippings [People, science, CIW, etc.], 1909, 1911, 1920, n.d.	6	6
Lectures and articles by others, 1896, 1904, 1917, 1922, 1932, 1934, 1939	2	17
Articles by others, 1901	6	6
Artistic profile of Bauer, n.d.	2	18
Compass-like sketch [Appears in portrait of L.A.B.], n.d.	2	19
Series 6: Miscellaneous, 1885, 1922, n.d. Miscellaneous [Portraits of scientists, University of Cincinnati	2	20

	<b>Box</b>	<u>Folder</u>
fundraising correspondence, mailing lists, etc.], n.d.		
Photographs: Miscellaneous or unidentified, 1885, n.d.	4	5
Photographs: Miscellaneous or unidentified, n.d.	6	3

## **Subject Terms**

Topics: Carnegie (Ship)

Scientific Expeditions

Geophysics Geomagnetism

Occupation: Geophysicists

Corporate Names: Carnegie Institution of Washington, Dept. of Terrestrial Magnetism

Locations: Samoa

India

Forms: Photographs

Correspondence Scrapbooks

## **Bibliography**

Good, Gregory A. "Louis Agricola Bauer." *American National Biography*, ed. John A. Garraty and Mark C. Carnes, 2:349-351. New York: Oxford University Press, 1999.

## **Related Collections**

James Percy Ault Papers, 1904-1957, Department of Terrestrial Magnetism, Carnegie Institution of Washington.