

# Finding Aid for the Alexander Langsdorf Papers

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## **Descriptive Summary**

Repository: University Archives, Department of Special Collections, Washington University Libraries, One Brookings Drive, Campus Box 1061, St. Louis, MO 63130, Telephone: (314) 935-5444 or (314) 935-9730, Fax (314) 935-8320, e-mail: [spec@wumail.wustl.edu](mailto:spec@wumail.wustl.edu), website: <http://library.wustl.edu/units/spec/archives>

Creator: Alexander Langsdorf.

Title: Alexander Langsdorf Papers.

Dates: 1893 – 1974.

Quantity: 10.5 linear feet.

Language: English.

## **Biographical Note**

Alexander Suss Langsdorf, son of Adolph and Sarah (Suss) Langsdorf was born August 31, 1877 in St. Louis, Missouri. Graduating from St. Louis High School in 1894, he received a Bachelor of Science degree from the School of Engineering at Washington University in 1898, and a M.M.E. [Masters of Mechanical Engineering] from Cornell University in 1901.

Alexander Langsdorf married Elsie Hirsh June 26, 1906 and had two children. Their daughter Helen (Shiman) (BS '29) married and had three children, Paul, Elsa, and Steven. Their son Alexander Langsdorf, Jr. (BS '32) married Martyl Schweig (BS '38) in 1941 and had two children, Suzanne and Alexandra (Sandie).

Alexander Suss Langsdorf served as a Professor of Electrical Engineering at Washington University from 1901 – 1910. He continued as a Professor of Engineering and served as Dean of the Washington University School of Engineering and Architecture from 1910 – 1920 and from 1929 – 1948. Between 1950 and 1973 Langsdorf served as a Professor Emeritus of Engineering. Professor Alexander Suss Langsdorf died in St. Louis, November 9, 1973.

For further biographical information, see *The Book of St. Louisans*, edited by John W. Leonard (St. Louis: The St. Louis Republic, 1912), page 354.

## **Scope and Content Notes**

This collection is organized into six series, as described below:

Series 01: University History. Mainly concerns Langsdorf's research for his unpublished history of Washington University, titled "The Story of Washington University" (arranged alphabetically by subject)

Series 02: Labor Arbitration Records (arranged alphabetically by client name)

- Series 03: Consulting Records (arranged alphabetically by client name)
- Series 04: Publications and Reprints. Includes speeches and addresses (arranged alphabetically by title)
- Series 05: General Correspondence (arranged alphabetically by last name of correspondent)
- Series 06: Miscellaneous drawings
- Series 07: Personal Papers (arranged alphabetically by subject)
- Series 08: University Materials honoring Professor Langsdorf (arranged alphabetically by subject)

For related materials, see also the Finding Aid for the Alexander Langsdorf Jr. Papers, a collection held by University Archives.

## **Administrative Information**

### **Source of Collection**

This material was donated to University Archives. Additional material was donated by Alexandra Shoemaker (granddaughter of Alexander Langsdorf, Sr. and daughter of Alexander Langsdorf, Jr.) in November 2006.

### **Accruals**

Accruals are interfiled.

### **Processing Information**

Compiled by Sarah Pabarcus in September 2005. Updated by Miranda Rectenwald in November 2006.

## **Restrictions**

### **Access Restrictions**

There are no restrictions to access.

### **Use Restrictions**

Users of the collection must read and abide by the Rules for the Use of University Archives Materials.

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## Collection Contents

### Series 01 – University History

(arranged alphabetically by subject)

Box No. Folder

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01	Bieber, Ralph – History of Washington University, 1939
	Biographical References, n.d.
	Brookings, Robert S., 1933 – 1934
	Chauvener, William – Naval Academy, 1935 – 1944 [not on shelf as of 9/30/05]
	Chronology, n.d.
	College, 1918 – 1930
	The Collegiate Department, 1930 – 1940
	Corporation, 1933 – 1934
	Corporation Records – Notes, n.d.
	Courses of Study, n.d.
	Crow, Wayman, 1934 – 1951
	Dentistry, School of, 1930 – 1934
	Departments – General, 1912 – 1936
	Douay, Gawston, 1934 – 1951
	Education, 1927 – 1936
	Eliot Daily, n.d.
	Eliot, Thomas Lamb, 1887 – 1934
	Eliot, William Greenleaf, 1861 – 1934
	Eliot, William Greenleaf, 1887 – 1935
	Engineering, School of, 1902 – 1903

Fine Arts, School of, 1929 – 1937

General History, 1914 – 1991 [not on shelf as of 9/30/05]

Holm, Victor S., 1935

Hoyt, Joseph Gibson, 1940

Institutions, Other, 1928 – 1935

Law, School of, n.d.

Law School, St. Louis, 1951

Lectures, n.d.

Manual Training School, 1935

Mary Institute, 1912 – 1939

Mary Institute, History of, 1919 – 1931

Medicine Clippings, 1929 – 1934

Medicine, School of, 1926 – 1951

Medicine, School of, 1910 – 1952

Messiah, Church of, 1934 – 1935

Mission Free School and Other Material on Eliot, 1931 – 1936

Mission Free School, 1934

Missouri Historical Society, n.d.

Missouri, University of, 1908

Music, School of, 1952

02 Negro Student, 1946 – 1951

New Departments, 1952

O'Fallon Polytechnic Institution, n.d.

Outline 1925, n.d.

Photographs, n.d.

Polytechnic Institute, 1937

Public Library, 1937

Public Schools, 1932 – 1934

Publications, 1935

Research, 1950 – 1952

Rhodes, Christopher, 1934

Seventy-Fifth Anniversary of the Founding of Washington University, n.d.

Smith Academy – Manual Training School, 1906

St. Louis, 1912 – 1935

St. Louis History, 1913 – 1952

St. Louis Misc., 1933 – 1935

St. Louis University, 1935

Story of Washington University – Charter, 1936 – 1950

03 The Story of Washington University – Outline, n.d.

Story of Washington University – Sources, 1935 – 1950

Student Body, 1915 – 1935

Throop, George R., 1950

Tree Planting, 1905

Washington, George, 1931 – 1952

Washington, George – Portrait, 1925

- Washington University Union, n.d.
- 04 "The Washington University Story, 1853 –1953" [A]  
"The Washington University Story, 1853 –1953", [1953]
- 05 "The Washington University Story, 1853 – 1953", [1953]
- 06 "The Washington University Story, 1853 – 1953", [1953]
- 07 Alphabetical File – Academy of Science of St. Louis, n.d.  
Alphabetical File – Architecture, School of, 1930-34, n.d.  
Alphabetical File – Art, School of, 1930 – 1934, n.d.  
Alphabetical File – Alumni, 1937  
Alphabetical File – Astronomy Dept., 1925  
Alphabetical File – Athletics, 1935  
Alphabetical File – Bibliography, n.d.  
Alphabetical File – Biographies (includes administrative histories and biographies of donors), n.d. [not on shelf as of 9/30/05]  
Alphabetical File – Brookings, Robert, 1927 – 1932,  
Alphabetical File – Brookings Institute, n.d.  
Alphabetical File – Buildings (chronology), n.d.  
Alphabetical File – Buildings (notes), n.d.  
Alphabetical File – Buildings and Grounds, n.d.  
Alphabetical File – Celebrations (of universities other than WU), 1927  
Alphabetical File – Centennial (of WU), 1953  
Alphabetical File – Ceremonies, 1950 – 1951  
Alphabetical File – Chapter 5 – Drafts, n.d.

- Alphabetical File – Chapter 7 – Outline, n.d.
- 08 Alphabetical File – Chauvenet, William, n.d.
- Chronological File, 1893 – 1899
- Chronological File, 1901 – 1905
- Chronological File, 1905 – 1910
- Chronological File, 1910 – 1915
- Chronological File, 1916 – 1920
- Chronological File, 1921 – 1922
- Chronological File, 1923
- Chronological File, 1924 – 1928
- Chronological File, 1929
- Chronological File, 1930
- Chronological File, 1931 – 1936
- Chronological File, 1937 – 1939
- Chronological File, 1940 – 1945
- Clippings re: Washington University faculty and donors, 1929 – 1936
- Collated Material, 1944 – 1951
- Contents for final chapter, n.d.
- Facts about St. Louis (includes correspondence with city officials re: city history), 1951
- General Plan and Organization, n.d.
- Holmes Smith, History of WU – corrected copy, n.d.
- Holmes Smith, History of WU – correspondence and notes, n.d.

- 09 Note cards containing research notes
- 10 Note cards containing research notes
- 11 Note cards containing research notes

**Series 02 – Labor Arbitration Records**

(arranged alphabetically by client name)

Box No.	Folder
01	American Cotton Fiber Co., 1929
	Aluminum Ore Co., 1944
	Associated Transports and International Brotherhood of Teamsters, 1949
	Carr, Carr and Gravely – Alvey Mfg. Co., 1934
	Carter Carburetor Corporation and United Automobile, Aircraft and Agricultural Implement Workers, 1950
	Chauffeurs Union No. 405 and Yellow Cab Company of Missouri, 1947
	Checklist of Labor Disputes, n.d.
	Emerson Electric Mfg. Co., 1944
	Emerson Electric Mfg. Co., 1944
	Fruin-Colnon Contracting Company and International Association of Machinists, 1943
	Fruin-Colnon Contracting Company and International Association of Machinists, 1943
	Fruin-Colnon Contracting Company, 1943
	Granite City Steel Company, 1942
	Granite City Steel Company, 1944
	Granite City Steel Company, 1942

Hussman Refrigerator Company and Electrical Workers, 1949 (2 folders)

Hussman Refrigerator Company and Electrical Workers, 1948 (2 folders)

Kalish-Burton and Cameron, 1938

Machinists, International Association and Granite City Steel, 1943

Mathews, 1929

Medart, Fred Mfg. Co., 1945

Mephan Company, 1938

02 Messick, 1934

Missouri Pacific Transportation Brotherhood of Railway Trainmen, 1945 (2 folders)

Missouri Utilities Company, 1948

National Lead Company and United Gas, Coke and Chemical Workers, 1947

Pratt and Whitney Aircraft Company and Building and Construction Trade Council of Kansas City, 1944

Shapleigh Hardware Company, 1944

Shell Oil Company and International Association of Machinists, 1945

Shell Oil Company, 1953

Southwestern Bell Telephone, 1952

Southwestern Bell Telephone, 1944

St. Louis Black and White Cabs Inc. and International Brotherhood of Teamsters, 1947

United Electrical, Radio and Machine Workers of American and Serval Inc., 1948

United Electrical, Radio and Machine Workers of American and  
Servel Inc., 1948

Wagner Electric Company and United Electrical Radio and Machine  
Workers of America

**Series 03 – Consulting Records**

(arranged alphabetically by client name)

Box No. Folder

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01	A.S. Aloe Company, 1945
	Allen Industries, 1954
	Arbitration of Grievances, 1954
	Barrett Equipment Company, 1942 – 1944
	Barrett Equipment Company, 1934 – 1944 [not on shelf as of 9/30/05]
	Barrett Equipment Company, 1945
	Belleville Shoe Manufacturing Company, 1955
	Blanchett Park, 1938
	Brown vs. Union Electric Company, 1961 – 1962
	Carter Case, 1963
	Continental Electric Company vs. Duntze, 1945
	Curtis Manufacturing Company, 1933 –1938
	Emerson Electric Manufacturing, 1955 – 1958
	Emerson Electric Manufacturing, 1959
	Famous Barr, 1926
	Flex-O-Lite Manufacturing, 1961
	General Dry Batteries Inc., 1956

Helfrich Coal Company, 1937

International Ladies Garment Workers Union and Jackson Garment Company, 1956

Jackson, Tennessee, 1956

Kalish – Anesthesia Patent, 1940

Kalish – Burton vs. Cameron, 1939

Kalish – Lempco (Cleveland Case) vs. Simmons, 1942

Kalish – Universal Match, 1943

Kalish – Voltage Regulator, 1942

Kalish – Bursch (Popcorn Machine), 1941

Langsdorf, A.S., 1907 – 1925

Lewin Mathes Company, 1953

National Candy Company, 1929

New Era Shirt Company, 1955

Olin Industries Inc., 1954

Report and Decision of Arbitrator, 1955

02 Ryerson and Son, Inc., 1946 – 1947

St. Louis Better Business Bureau, 1939 – 1944

The Pullman Company, 1933 – 1934

Tiley, D.H. Dur-O-Stone Corporation, 1947 – 1948

Union Electric, 1943 – 1945

United Engineers and Construction vs. Pulliam, 1955 – 1956

Universal Match, 1936 – 1938

Various Patent, n.d.

Various Patent, 1932 – 1943

Westcott Valve, 1928 – 1931

**Series 04 – Publications**

(arranged alphabetically by title)

Box No. Folder

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- 01 Langsdorf, Alexander S., "Air-Gap Flux in Induction Motors"  
*American Institute of Electrical Engineers* September 22, 1905
- American Institute of Electrical Engineers, Annual Meeting,  
September 22, 1905
- American Institute of Electrical Engineers, 26<sup>th</sup> Annual Convention,  
June 28-July 1, 1909
- Journal of the Association of Engineering Societies*, Vol. XXXI, No.  
3, September 1903
- Journal of the Association of Engineering Societies*, Vol. XLII,  
Whole Number 328, February 1909
- Journal of the Association of Engineering Societies*, Vol. XXXII,  
Whole Number 272, June 1904
- Langsdorf, Alexander S., "Atomic Impasse" (Address before the  
Ethical Society of St. Louis), March 18, 1962
- Bulletins for Speaking Engagement by Langsdorf at the St. Louis  
Unitarian, St. Louis Ethical Society, and Wesley Methodist Church.
- Langsdorf, Alexander S., "By the Mississippi" *St. Louis Star-Times*  
June 30, 1947
- Langsdorf, Alexander S., "Can Smoke Be Eliminated?" (WU  
Broadcast), April 17, 1936
- Langsdorf, Alexander S. and Raymond R. Tucker, "Carbon  
Monoxide Concentration in Garages," June 1930
- Langsdorf, Alexander S., "Contributions to Synchronous-Machine  
Theory" January 1937

Langsdorf, Alexander S., [Address] Dedication of Engineers' Club Building November 5, 1959, *Journal of the Engineers' Club of St. Louis*, December 1959 and January 1960

Langsdorf, Alexander S., "The Development of Torque in Slotted Armatures" *Transaction Paper*, October 26, 1962.

Langsdorf, A.S., "Effect of Atmospheric Smoke Pollution; A Summary of Opinions From Current Literature," October 1927

Langsdorf, Alexander S., "Effect of Atmospheric Smoke Pollution" (reprinted from *Mechanical Engineering*, November 1927)

Electrical Society and of the Society of Mechanical Engineers of Cornell University. Vol. 8, 1900-01

Langsdorf, Alexander S.; Burch, O.G.; Lawrence S.E., "Electrodeposition of Copper-Nickel Alloys", *American Electrochemical Society Preprint* 57-16, May 29-31, 1930

Langsdorf, Alexander S., "Electrolysis of Reinforced Concrete" *Journal of the Association of Engineering Societies*, Vol. XLII No. 2, February 1909.

Langsdorf, Alexander S., "Empirical Equation of the Speed and Torque Characteristics of the Series Motor", *Washington University Studies*, Vol. 6, No. 1, pp. 3-11, 1918

Langsdorf, Alexander S., "Engineering Research" *St. Louis Commerce*, April 25, 1945

Langsdorf, Alexander S., "Ethics and Man's Search for Security" (Address to Ethical Society of St. Louis), January 8, 1950

Langsdorf, Alexander S., "Ethics in an Irrational World" Felix Adler Lecture 1949 (American Ethical Union)

*Executive Magazine*, Vol. XIII, No. 5, October 1929

Langsdorf, Alexander S., "Experiments on the Electrolysis of Reinforced Concrete" *Engineering Contracting*, April 28, 1909.

Langsdorf, Alexander S., "Fire Hazards in Warm Air Ducts", *Washington University Studies – New Series Science and Technology*, No. 4, July 1931

Graduation Speech, 1955

Graduation Speech from Washington University, June 1898 (with related material)

Langsdorf, Alexander S., "Graphical Determination of the Characteristics of Direct Current Generators and Motors", *Washington University Studies*, Vol. 1, No. 1, July 1913

Langsdorf, Alexander S., "Graphical Determination of Flux Density in Armature Teeth", *Washington University Studies*, Vol. 1, No. 1, July 1913

Langsdorf, Alexander S., "A Graphical Method for Analyzing Distorted Alternating Current Waves", *Physical Review*, Vol. XII, No. 3, March 1900

Langsdorf, Alexander S., "Has Science Betrayed Mankind?" (Ethical Society of St. Louis), October 5, 1947

Jamieson, James P. "Intimate History of Washington University", 1941

Langsdorf, Alexander S., "The Lengthening Shadow of Man", December 6, 1959

Langsdorf, Alexander S., and G.E.M. Jauncey, KM.K.S. Units and Dimensions (NY: Macmillan Co, 1940) [dedicated to Elsie from Alex]

*Missouri School Journal*, Vol. 40, NO. 1, January 1923

Langsdorf, Alexander S., "Notes on the Geometry of the Characteristic Curves of the Synchronous Motor", *Washington University Studies*, Vol. VII, Scientific Series No. 2, pp. 47-57, 1920

02 Langsdorf, Alexander S. and DuBridge, Lee A., "Optical Rotation of Unpolarized Light" *Journal of the Optical Society of America* Vol. 24, No. 1, January 1934

Langsdorf, Alexander S., "Philosophy of Textbook Treatment and Presentation of Alternating Current Machinery", *Society for the Promotion of Engineering Education*, Vol. XXVI, No. 9, May 1936

Langsdorf, Alexander S., *Principles of Direct Current Machines*, (McGraw-Hill Book Company, Inc., 1915)

Langsdorf, Alexander S., "Realism in Engineering Education", June 1946

Langsdorf, Alexander S., "Science and Human Values", *Proceedings of the Missouri Academy of Science*, Vol. 1, 1934-35

Langsdorf, Alexander S. and Bubb, F.W., *Trigonometry*, 1940 [2 copies]

Langsdorf, Alexander S., "Valuation of Public Utilities: Is It Possible to Reconcile Original-Cost and Reproduction . . ." *Journal of Engineering Education*, Vol. 37, No. 4, December 1946

*Washington University Record*, Series III, Vol. IV, No. VI, April 1909

*Washington University Record*, Series I, Vol. IX, No. II, December 1913

*Washington University Record*, Series I, Vo. XVI, No. I, October 1920

*Washington University Record*, Series I, Vol. XIX, No. I, October 1923

*Washington University Studies, New Series Science and Technology*, No. 3, October 1929

*Washington University Studies*, Vol. I, Part I, No. I, July 1913

*Washington University Studies*, Vol. II, Part I, No. I, July 1914

*Washington University Studies*, Vol. I, Part I, No. 2, January 1914 (2 copies)

*Washington University Studies*, Vol. VI, No. I, July 1918

*Yeatman Life*, October 1910

03 Langsdorf, Alexander S. *Principles of Direct Current Machinery* (Chapters 1-5), n.d.

Langsdorf, Alexander S. *Principles of Direct Current Machinery* (Chapter 5- Appendix), n.d.

Langsdorf, Alexander S. *Principles of Direct Current Machinery* (Appendix), n.d.

Langsdorf, Alexander S. *Principles of Direct Current Machinery* (Publishers Proofs), n.d. [2 folders]

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Context), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 1), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 2), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 3), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapters 1-3), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 4), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 5), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 6), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 7), n.d. [2 folders]

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 8), n.d. [2 folders]

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 9), n.d. [2 folders]

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapters 4-9), n.d.

04 Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 10), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 11), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Chapter 14), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Figures and Illustrations), n.d. [2 folders]

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Illustrations), n.d.

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Publishers Proofs), n.d. [2 folders]

Langsdorf, Alexander S. *Theory of Alternating Current Machinery* (Publishers Proofs – duplicate), n.d.

Langsdorf, Alexander S., Unidentified Illustrations, n.d.

Langsdorf, Alexander S., Unidentified Illustrations, n.d.

Langsdorf, Alexander S., Unidentified Illustrations, n.d.

Langsdorf, Alexander S., Unidentified Proof, n.d.

### **Series 05 – General Correspondence**

(arranged alphabetically by last name of correspondent)

Box No.	Folder
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01	Bryan, W.E., n.d.
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Bryan, W.E., n.d.

General Correspondence, 1928 – 1962

Jauncey, G. E. M., 1941

Keysor, 1926

Keysor, 1926 – 1944

Mallinckrodt, 1925 – 1927

Mallinckrodt, 1931

Mallinckrodt, 1931 – 1934

Mallinckrodt, 1935 – 1937

Mallinckrodt, 1938 – 1945

Mallinckrodt, 1947 – 1948

Mallinckrodt, 1949 – 1950

Mallinckrodt, 1947 – 1958

Mallinckrodt Chemical Works, n.d.

National War Labor Board, n.d.

Steinbrink, Meier [to Elsie and Alec], 1961

Webster, Mr. S.J., 1929 – 1947

Wan Nostrand, D. Company, 1936 – 1944

**Series 06 – Miscellaneous Drawings**

Box No.	Folder
01	Small Book of Drawings, 1941
	Miscellaneous Drawings
02	Miscellaneous Drawings
03	Miscellaneous Drawings
04	Miscellaneous Drawings

**Series 07 – Personal Papers**

(arranged alphabetically by subject)

Box No.	Folder
01	Biographical Information, A. S. Langsdorf, Sr. [newspaper clippings, and articles]
	Biographical Information, Mrs. Elsie Langsdorf [newspaper clippings]

Correspondence, from J.C. Stearnes, 1948 [personal]

Correspondence with family, 1919 – 1930

Correspondence with family (children), 1940 – 1973

Founders Day Alumni Honors, 1958

90<sup>th</sup> Birthday Anniversary - dedication of Langsdorf Engineering Seminar Room, Cupples Hall II and other certificates of honor, 1967

Poem for Christmas Party at Artists Guild, n.d.

Portrait of Dean Langsdorf, unveiling ceremony, 1948

**Series 08 – University materials honoring Professor Langsdorf**

(arranged alphabetically by subject)

Box No.      Folder

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[located in box with series 07]

- |    |   |
|----|---|
| 01 | Fellowship Competition for High School Seniors, 1968 and 1974 |
|    | Memorial Service for Dean Langsdorf, Graham Chapel, 1974      |