ALEXANDER P. ANDERSON:

An Inventory of His Papers and Research Notebooks at the Minnesota Historical Society

Manuscripts Collection

OVERVIEW

Creator: Anderson, A. P. (Alexander Pierce).

Title: Alexander P. Anderson papers and research notebooks.

Dates: 1855-2003 (bulk 1890-1943).

Language: Materials in English, German, and Swedish.

Abstract: The papers and research notebooks of Alexander P. Anderson. The

papers include correspondence, articles and essays, school and teaching materials, biographical information, family history, and genealogical data. Two sets of research notebooks focus on the process of puffing cereal grains and on Anderson's experiments with aerodynamics. A smaller set of notebooks focuses on other miscellaneous experiments, such as his experiments on the growth of fruit, watermelons, and puffing wood. The research notebooks on the process of puffing cereal grains and other starches are on

microfilm.

Quantity: 7.25 cubic feet (8 boxes) and 9 microfilm reels.

Location: See Detailed Description for shelf locations.

BIOGRAPHICAL NOTE

Alexander P. Anderson invented the process of puffing cereal grains and other starches. He was born in Featherstone, Minnesota in Goodhue County on November 22, 1862, the son of John and Britta Anderson, Swedish immigrants.

Anderson went to the University of Minnesota in 1890 and received his B.S. in 1894 and his M.S. in 1895. In 1895 he went to the University of Munich (Ludwig-Maximilians Universität München) in Germany, where he got his Ph.D. in 1896. He taught at Clemson College in South Carolina from 1897-1898, married Lydia Johnson of Glasgow, Scotland, in 1899, and taught at the University of Minnesota in 1899. He returned to Clemson and taught there from 1899-1901.

In 1901 he became the Curator of the Herbarium at Columbia University, which allowed him to do research at the New York Botanical Garden, where he discovered the process of puffing starch. He obtained patents on the process and started the Anderson Puffed Rice Company in 1905, which was in business until 1941. He partnered with Quaker Oats and developed puffed rice and wheat products, including the cereal Quaker Crackles. He conducted his work in a lab in Chicago until 1917 when he built his own Tower View laboratory at his home near Red Wing, Minnesota, and continued his experiments there.

He also conducted numerous experiments in aerodynamics, working on a wind motor

based on the theories and principles of tornadoes, and other ideas, including experiments on puffing wood, the growth of fruits, pumpkins, watermelons, gourds, and fungi. In 1937 he was awarded the Charles Reid Barns honorary life membership by the American Society of Plant Physiologists, and he published a book of short stories, poetry, and reminiscences of his boyhood in Minnesota titled *The Seventh Reader* in 1941. He died on May 7, 1943.

SCOPE AND CONTENTS

The papers and research notebooks of Alexander P. Anderson, who discovered the process of puffing cereal grains and other starches. The papers consist of biographical information, family histories and genealogical data on Alexander P. Anderson's family and relatives, school and teaching materials, and correspondence and related papers.

The school papers and teaching materials consist of Anderson's class notebooks from the University of Minnesota and the University of Munich, some correspondence, and photographs. The class notebooks contain his handwritten notes and original drawings and sketches. Also included are sketch pads with original drawings by Anderson. Teaching materials consist of class record books, schedules, and some miscellaneous correspondence.

The correspondence and related papers includes letters between Anderson and family members, John Lind, and others. There is also correspondence concerning a number of subjects and events including Anderson's illness and surgery, the Anderson Fellowship funds, teaching positions, World War II, and others.

Research notebooks focus on the process of puffing cereal grains and other starches (39 volumes on microfilm), experimental aerodynamics (20 volumes), and miscellaneous experiments. Also included with the research notebooks are correspondence and related papers regarding the puffing process along with patents and patent applications obtained in the United States and foreign countries related to the process. Miscellaneous research notebooks focus on his experiments on the growth of fruit, watermelons, puffing wood, and others.

ARRANGEMENT

These documents are organized into the following sections:

Biographical Information, Family History, and Genealogical Data Articles, Clippings, Essays, and Papers School Papers and Teaching Materials Correspondence and Related Papers Research Notebooks

ADMINISTRATIVE INFORMATION

Preferred Citation:

[Indicate the cited item and/or series here]. Alexander P. Anderson Papers and Research Notebooks. Minnesota Historical Society.

See the Chicago Manual of Style for additional examples.

Microfilm Production:

Saint Paul, Minnesota: Minnesota Historical Society, 1976. 9 reels.

Location of Originals:

Original research notebooks on process of puffing cereal grains and other starches: New York Botanical Garden; New York, NY.

Accession Information:

Accession numbers: 12,152; 16,000; 16,390

Processing Information:

Processed by: Alex Kent, December 2009.

Catalog ID number: 001717630

DETAILED DESCRIPTION

BIOGRAPHICAL INFORMATION, FAMILY HISTORY, AND GENEALOGICAL DATA

Location	Box
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141.E.10.7B 1 Photograph of Alexander P. Anderson and postcards of

Tower View, 1905, 2003.

Biographical Information:

Alexander P. Anderson organizational memberships certificates and correspondence, 1896-1941.

Alexander P. Anderson finances: personal loans and notes, land purchase receipts, 1855, 1864, 1866, circa 1929-1934, circa 1940-1943. 2 folders.

Alexander P. Anderson and Lydia Anderson Research and Fellowship Funds, 1928-1944. 3 folders.

Minnesota Inventors Hall of Fame, 1982.

Includes list of patents with numbers and descriptions of inventions.

The Vasa Lutheran's Children's Home background, clippings, correspondence, 1924, 1926, 1933.

Family history and genealogical data:

Alexander P. Anderson and Anderson family biographical and historical information, undated, 1942.

Anderson family genealogical charts, undated.

Solomon Anderson family: Biographical information and correspondence, 1909, 1921, 1927-1930, 1934.

Solomon is the uncle of Alexander P. Anderson.

John Lind family biographical information, history, and genealogy, 1981-1984, 1999. 3 folders.

Includes genealogical data on the Jonas Persson family.

ARTICLES, CLIPPINGS, ESSAYS, AND PAPERS

Location Box 141.E.10.7B 1

Articles and clippings by and about Anderson and miscellaneous subjects, undated, 1892, circa 1938-1941,

1967. 6 folders.

Essays and papers by and about Alexander P. Anderson, undated, 1894-1902, 1982. 3 folders.

SCHOOL PAPERS AND TEACHING MATERIALS

Location Box 141.E.10.7B 1

Clemson College, 1897-1901. 2 folders.

Includes correspondence and class record book.

University of Minnesota miscellaneous papers and photographs, circa 1893-1943. 5 folders.

Includes photographs of Anderson's friends, the Anderson Registering Balance, clippings, and class reunion programs and related papers.

Location Box 141.E.10.7B 2

University of Minnesota miscellaneous papers and photographs, circa 1893-1943. 3 folders.

University of Minnesota teaching materials and related papers, 1899-1900. 3 folders.

Includes schedule, notes on botanical experiments, personal receipts.

University of Minnesota class notebooks:

Botanical notes, 1892.

Chemistry, 1892.

History, 1892-1894.

Zoology and Botany lectures, 1893-1894.

Zoological lecture and class notes, 1892-1895.

Zoology, circa 1890-circa 1892.

University of Minnesota sketch pads: Botany and miscellaneous, undated, circa 1891.

University of Munich Notebooks:

Notes on laboratory methods, new apparatus..., 1895.

Goebels class lecture notes, 1896.

University of Munich miscellaneous papers and printed materials, 1895-1896, 1897. 2 folders.

In German and English.

University of Munich miscellaneous personal papers and correspondence, 1895-1896.

Location	Box
141.E.10.9B	3

Alexander P. Anderson's inaugural dissertation, 1896, 1997.

Includes original in German with English translation.

CORRESPONDENCE AND RELATED PAPERS

Location	Box
141.E.10.9B	3

Family members, circa 1876-1979, bulk 1876-1937. 4 folders.

Includes correspondence with Anderson's sister, his brothers, his Uncle Solomon Anderson, and others. Some of the correspondence is possibly in Swedish, with some translations.

Henry S. Graves, 1897-1901.

Jonas Victor Johnson, Mrs. Fred Olson, circa 1930-1934, 1941.

Includes photographs of Jonas Victor Johnson.

John Lind, circa 1893-circa 1928. 2 folders.

Includes photocopied correspondence and John Lind obituary.

John and Norman Lind, 1895-1910.

D.T. MacDougal, 1900-1921.

Includes letter regarding the discovery of the process for puffing cereal.

Letters to Alexander P. Anderson while at University of Munich, 1895-1896.

Includes miscellaneous photographs taken when Anderson was at University of Munich.

Miscellaneous, circa 1894-circa 1930

Topical correspondence:

Anderson Fellowship Funds, 1924, 1933-1946.

Anderson Registering Balance: Advertising and photographs, 1894-1901. 2 folders.

Difficulties manufacturing corn puffs, circa 1911-1913.

Illness and surgery of Alexander P. Anderson, circa 1908-1924.

Land purchases, contracts, property deeds, stock certificates, circa 1907-circa 1930s. 2 folders.

Land purchases, 1907, 1908, 1919, 1960.

Quaker Oats miscellaneous, 1932-1933, 1935-1940.

Teaching at Clemson, circa 1897-1899.

Teaching positions, circa 1901.

Teaching years, 1896-1901. 2 folders.

Includes botany class notes from Columbia.

University of Minnesota, 1895-1899.

World War II and miscellaneous, November 1940-August 1941.

RESEARCH NOTEBOOKS

Location Box 141.E.10.10F 4

Process of puffing cereal grains and other starches:

Anderson Puffed Rice Company business records, 1905-1941. 4 folders.

Includes correspondence and related papers, organization of, annual reports, director's meetings, and correspondence and papers related to the final liquidation of the company in 1941.

Detailed content analysis of research notebooks prepared by the Goodhue Historical Society, undated.

Location Reels
M314 1-9

Research Notebooks:

Records (39 volumes) of Anderson's experiments in puffing cereal grains and other starch-containing materials conducted between 1900 and 1901 in South Carolina, at the New York Botanical garden, and in his Red Wing Laboratory.

Originals are located at the New York

Botanical Garden.

Microfilm was produced in 1976 by the

Minnesota Historical Society.

M314	1	Notebooks 1-3, 1899-May 1904.
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Reel

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M314 Notebooks 4-6, May 1904-May 1907. 2

Location Reel

M314 Notebooks 7-10, July 1907-July 1909.

Location Reel

M314 Notebooks 11-15, July 1909-March 1911.

Location Reel

M314 5 Notebooks 16-20, April 1911-July 1912.

Location Reel

M314 Notebooks 21-25, August 1913-April 1914.

Location Reel

M314 Notebooks 26-28, 31-33, April 1914-August

1922, November 1924-January 1926.

Notebooks 29-30 (September 1922-October 1923) are missing.

Location Reel M314

Notebooks 34-37, January 1826-March 1928.

Location Reel M314 9

Notebooks 38-40 and unnumbered notebook, March 1928-July 1931, 1930-1931.

Location Box 141.E.10.10F

Correspondence and related papers:

Discovery of process, early accounts of process, early problems, 1901-1941. 2 folders.

Advertising puffed products, 1904-1936.

Continuous puffing process and miscellaneous, circa 1914-1937.

Continuous puffing process, machinery, miscellaneous, circa 1910-circa 1939.

Publicity, circa 1902-1905.

Ouaker Oats and miscellaneous, circa 1918circa 1931.

Rice and bread making, circa 1921-1932.

Included is a small packet of mochi opaque rice grains.

Starch, puffed rice, wheat, and popcorn, circa 1902-circa 1914, 1929-1930, 1937-1939, 1941. 2 folders.

Drawings and related papers, circa 1902-1921. 2

folders.

Drawings and related papers: Technical paper on starch, 1922.

Location Box 141.E.11.1B 5

Patents and patent applications:

Correspondence, 1902-1913, 1922-1933. 3 folders.

Includes correspondence with Anderson's patent attorneys Georgii and Massie.

Announcements and petitions: treating starch and cereal grains, undated, circa 1902, circa 1906-1907.

Early patents for popping and puffing rice, wood, undated, 1858, 1867, 1886.

The Art of Treating Starch Material, no. 707892. August 26, 1902.

Air-Dry Puffing Method, undated.

Crackle cereal, 1931.

Patents, 1904, 1912.

Patent Application 115,221 and 115,222: Preparing Cereal Products and Adhesives, 1902-1904.

Patent Application 116,279: The Art of Baking, 1902-1907.

Patent Application 133,283 and 133,284: Preparing Starch Materials and Adhesive Wafers, 1902-1910.

Patent Application 220,873: Treating Indian Corn, 1904-1909.

Patent Application: Production of Puffed Products, 1927.

Patents: Foreign countries, 1905.

List of pending and approved patents.

Patents: Foreign applications: Treating starch, 1902-1905. 2 folders.

Patents: Foreign applications and receipts, 1903, 1904-1907, 1920, 1929-1940. 2 folders.

Patent application papers, 1906-1907. 2 folders.

Includes correspondence and descriptions of inventions written by Alexander P. Anderson which were used in patent applications.

Location Box 141.E.11.1B 5

Experimental aerodynamics:

Miscellaneous materials: Clippings, wind velocity

tables, and related papers, circa 1925-circa 1935.

Detailed inventory of experimental aerodynamics research notebooks I-XX (1-20), undated.

Includes photocopied pages from research notebooks.

Research notebooks I-III, 1925-1928.

The original handwritten research notebooks of Alexander P. Anderson's experiments with aerodynamics, documenting his attempts to develop a wind motor, and other inventions and ideas. Pieces of various models used in his experiments are also included.

Location	Box
141.E.11.2F	6
Location	Box
141.E.11.3B	7

Research notebooks IV-XV (4-15), 1928-1934.

Research notebooks XIV-XX (16-20), circa 1936-1939.

Model notes, 1937-1938.

Miscellaneous notes and related papers, 1924-1940. 2 folders.

Miscellaneous research notes and related papers, undated, circa 1898, circa 1906-1909, circa 1916.

Reference material, undated.

Correspondence and related papers: Airplane engine purchase, 1929, 1931-1935. 2 folders.

Plans for patent applications, circa 1929, circa 1934-1935, 1997.

Reprints of helicopter and related aerodynamics patents, 1920s-1930s.

Miscellaneous research notebooks:

Miscellaneous reference material: Chemical experiments handbook, 1889.

Miscellaneous reference material: Pharmacopoeias, 1894, 1897.

Cucurbit fruits, pinius peziza disease, others, undated, 1898.

Growth of grape vine, circa 1901.

Location	Box
141.E.11.4F	8

Luffa cylindrica and Lageneria vulgaris research and notes, undated.

New apparatus, intstruments, inventions... 1895.

Puffing wood, circa 1919-1938.

Pysllium seed experiment miscellaneous notes and related papers, undated, circa 1930-1932, 1997. 2 folders.

Starch, circa 1903-1905.

Vitas rotundifolia, melex; Root pressure and SOP exudation experiment with weighing balance, undated.

Watermelon seed, drawings for paper on starch, undated, circa 1901.

Watermelon growth and tree diseases photographs and related papers, undated, circa 1901.

CATALOG HEADINGS

This collection is indexed under the following headings in the catalog of the Minnesota Historical Society. Researchers desiring materials about related topics, persons or places should search the catalog using these headings.

Topics:

Aerodynamics.

Cereal products.

Cereals, Prepared.

Food industry and trade.

Grain -- Research.

Starch.

Wheat -- Research.

Persons:

Anderson, Solomon.

Graves, Henry S.

Georgii, Max.

Johnson, Jonas Victor.

Lind, John, 1854-1930.

MacDougal, D. T.

Organizations:

Anderson Puffed Rice Company.

Clemson Agricultural College of South Carolina.

Columbia University.

Quaker Oats Company.

New York Botanical Garden.

University of Minnesota.

Universität München.

Places:

Munich (Germany).

Red Wing (Minn.).

Types of Documents:

Microforms.

Photographs.