

∞ The Ward M. Canaday Center ∞
for Special Collections
The University of Toledo

Finding Aid

➤ **Delos M. Palmer Sr. Papers 1930s-1970s** ◀

MSS-147

Size: 2.75 linear feet

Provenance: Gift of Delos M. Palmer Jr.

Access: open

Collection Summary: This collection documents the work of Delos M. Palmer Sr. for his consulting company, Delos M. Palmer and Associates, including his inventions; patents; and consultation work related to manufacturing processes. The collection also includes his ideas on manufacturing glass, photographs from the University of Toledo College of Engineering (manufacturing machinery), blueprints of his inventions and patents, coursework in Physics, and his Master's Thesis.

Subjects: [Business and Commerce](#)

Related Collections: University Archives, College of Engineering, Deans' Files, 1928-1989. UR PA/19.

Processing Note: This collection contains two series related to consulting work done by Delos M. Palmer Sr. The blueprints are located in the manuscripts oversize drawer five.

Copyright: The literary rights to this collection are assumed to rest with the person(s) responsible for the production of the particular items within the collection, or with their heirs or assigns. Researchers bear full legal responsibility for the acquisition to publish from any part of said collection per *Title 17, United States Code*. The **Ward M. Canaday Center for Special Collections** may reserve the right to intervene as intermediary at its own discretion.

Completed by: Janice Hackbush; last updated: July, 2014

Biographical Sketch

Delos M. Palmer Sr. was born June 23, 1897, in Monroe County, Michigan. He graduated from Scott High School in Toledo in 1915. He then went on to the Junior College at the University of Toledo, where he received his degree in 1919. He earned his Bachelor of Science in electrical engineering from the University of Michigan in 1921. Also at the University of Michigan he earned his Master of Science in physics in 1938.

Palmer began his career as an engineering instructor teaching at Kansas State College, where he remained from 1921-1923. He then spent three years working in the heavy traction division of the railway equipment engineering department of the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pennsylvania.

In 1926, Palmer became an assistant professor of Physics and Mechanical Engineering at the University of Toledo. In 1931, he proposed to the engineering faculty and UT President Henry Doermann the idea to start a four year engineering curriculum. Dr. Doermann approved of the idea, and the program was initiated in the fall of that year. In recognition of his work in organizing the program, Dr. Doermann appointed Palmer as Acting Dean of the college, even though Palmer's university rank at the time was only associate professor. The Engineering College curriculum was taught by UT professors and local engineers. Many local companies also donated supplies necessary for a quality engineering program. In the spring of 1935, President Philip C. Nash and the Board of Directors formally appointed Palmer as the Dean of the College of Engineering. While Dean of the school, he was responsible for the development of three laboratories: Mechanical, Metallurgical, and Hydraulic. Palmer pioneered and taught many of the courses, including thermodynamics, advanced thermodynamics, power plant engineering, fluid mechanics, heating and air conditioning, mechanical engineering laboratory, internal combustion engines, metallography, and heat treatment of cast iron and steel.

During the war years, Palmer directed many programs for civilian war training. In 1938 he became director of Civilian Pilot Training. From 1941 until 1943 he was director of the Engineering Science and Management War Training Program for Toledo and Northwestern Ohio. He was also director of the war training program for two aircraft radio signal corps programs for Wright Field. Palmer also was director of the National Defense Machine Shop Program which was designed to produce machine tool operators.

The engineering curriculum of the University of Toledo was accredited in December 1942 by the Engineers' Council for Professional Development, a joint agency of various national engineering societies of the United States and Canada. In August 1943, Palmer resigned his position as Dean of the College of Engineering. Because of the war, there were few students enrolled in engineering at this time. With his goal of establishing the engineering college accomplished at UT, he moved on to pioneer once again in the field of industry.

At this time, Palmer worked for the American Propeller Corporation of Toledo and later worked as engineer for the Champion Spark Plug Company, Ceramic Division in Detroit, Michigan. In 1945, Palmer decided to open his own consulting engineering firm, Delos M. Palmer & Associates, Inc. During his lifetime Palmer also authored six

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patents. At the time of his death in 1976 he was chairman of the board of his firm and its research-oriented affiliate, Dynamics Research and Development Corporation.

He was a member of many organizations throughout his life, including the American Society of Mechanical Engineers, American Ceramic Society, Society for Promotion of Engineering Education, American Society for Metals, Engineering Society of Toledo, National Society of Professional Engineers, Ohio Society of Professional Engineers, Toledo Society of Professional Engineers, Sigma Rho Tau (national speech honorary for engineering students), the UT Research Foundation, Toledo Area Technical and Scientific Educational Foundation, American Ordnance Association, the Toledo Club, Rotary Club of Toledo, Toledo Area Chamber of Commerce, Rubicon No. 237 F & AM, Ancient Accepted Scottish Rite, Zenobia Shrine, Multi-Pro-Forum Club, and Tau Beta Phi National Engineering Society. Palmer also had a number of honors bestowed upon him, including Who's Who in America, Who's Who in Engineering, American Men of Science, and Engineer of the Year of Toledo (1956.) He was also honored by the University of Toledo with an honorary Doctor of Science degree during the Centennial Convocation, February 25, 1973.

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Scope and Content Note

This collection mostly documents the work done by Delos M. Palmer Sr. for his consulting company, Delos M. Palmer and Associates. This material consists of files on his inventions, patents, and consultation work on different manufacturing processes. Also included are files on Palmer's ideas for the manufacturing of glass. Some early photographs from the University of Toledo College of Engineering are included, as are photographs of manufacturing machinery. Many blueprints of Palmer's inventions and patents are contained in the collection as a separate series. Schoolwork from a physics class Palmer took at the University of Michigan is included, as is a copy of his master's thesis.

Delos M. Palmer Sr.
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Series List

S1 Papers

1930s-1970s. Two linear feet. Contains files from school, consultation business, and a copy of his master's thesis. Bulk of the material contains inventions and patents done while working at his engineering firm.

S2 Blueprints

1930s-1970s. One quarter of a linear foot. Contains blue prints alphabetically arranged by title of invention. Located in Manuscripts Oversize drawer number five.

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Folder List

**Box Folde Arrangement
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S1. Papers

2	12	Air Refrigeration Scheme 1940, 1973
1	12	American Ceramic Society meeting Photos 1973
1	18	Articles 1940s
1	1	Articles about Delos M. Palmer 1954
1	21	Bresser Automator 1971
1	4	College of Engineering Photos - 1940s
1	39	Combined Torque Converter of Fluid Drive 1942
1	8	Correspondence 1970s
1	11	Correspondence Inspecting Parts 1941-1942
1	23	Corrosion Resistant Materials
1	25	De Vilbiss Co. 1938-1940
1	24	De Vilbiss Co. Solvents 1929-1930s
1	9	Dedication Photo 1969
1	2	Delos M. Palmer 1960s-1970s
1	26	Doehler Oil Casting 1942
2	1	Dust Collector 1920s & 1970s
1	22	Edwin F. Chittenden 1940
1	31	Electrostatic Printing - Glass Decorating 1963
1	13	Engineering Society of Toledo 1956 & 1978
2	4	Fire Alarm Patent 1940s, 1950s, 1960s
2	3	Furnace Burner Test 1928
1	27	George E. Eiffier 1938-1940
1	29	Glass Batching Preparation 1948, 1956-58
1	36	Glass Fiber Proposal 1947
1	32	Glass Fiber - Thread Making 1946-47
1	34	Glass Heat Treating by Superheated Steam 1967-68
1	30	Glass Mol - M & C Formula 1965
2	16	G.W. Potts 2-cycle internal combustion engine 1936
1	3	Honorary Degree Feb 25th 1973
1	16	Internal Combustion Engine 1974
1	17	Internal Combustion Engine Patents 1928
2	5	Internal Combustion Engine - Railway 1925-26, 1932-33
2	2	Joseph C. Fox Patent 1960s

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2	9	Levitation - Glass Melting 1958-61
1	35	Manufacture Sheet Glass 1963-65
1	5	Masters Thesis University of Michigan 1933
2	6	Miscellaneous Blue Prints and Patents 1940s
2	7	New Glass Melting FCE 1950s-1960s
2	8	New Glass Melting FCE 1950s-1960s
1	6	Note Book 1920s
2	11	Ohio Fuel Gas Co. - Remote Gas Reading Devices 1946
2	10	Owens Illinois Glass Co. Toledo Pipeline Explosion 1938
2	14	Patents 1931, 1946, 1948
2	15	Patents 1948
2	20	Patent - USA and Canada - Glass Batch Preparation 1960s
1	28	Pelletized Glass Batch 1949, 1973
2	21	Photos circa 1940s-1960s
2	22	Photos - Trains circa 1930s
1	7	Physics - University of Michigan 1938
1	15	Pinkinton's Float Glass 1959
1	33	Polishing Twin Ground Plateglass Acid and Fire Polish 1967
1	14	Presentation - Key to the City 1962
1	37	Proposed Method using CERMETS 1954-55
1	10	Radio Free Asia 1973
1	38	Rugg Lawn-mower Project 1940s
2	18	Single Phase Motor 1910, 1912, 1957
2	13	Spark Plug Patent 1945-46
1	19	Special Brick Laying 1955-57
1	40	Travelers Insurance Company 1935
1	41	Valves Mechanically Operated (oil engines) 1909-1928
2	17	Vibration Mechanism Experiment 1956
2	19	WEMCO Diesel Locomotive 1923
1	42	Wonder Bread Company 1937
1	20	40" Bubble Chamber 1964

S2 Blueprints

Manuscripts Oversize drawer #5