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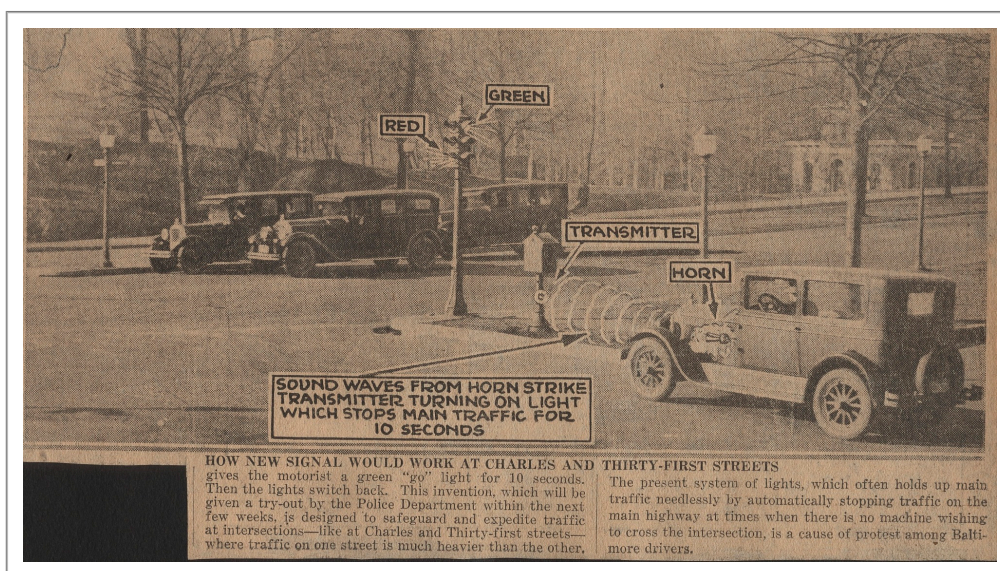
National Museum of American History Kenneth E. Behring Center

Guide to the Charles Adler, Jr. Collection

NMAH.AC.0351

Don Darroch

1990



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Collection Overview

Repository:	Archives Center, National Museum of American History
Title:	Charles Adler, Jr. Collection
Date:	1899 - 1980
Identifier:	NMAH.AC.0351
Creator:	Adler, Charles, Jr., 1899-1980 (engineer, inventor)
Extent:	6 Cubic feet (15 boxes)
Language:	English .
Summary:	The collection contains correspondence, news clippings, photographs, patents, and printed materials documenting the inventive career of Charles Adler, Jr. Adler is best known for his development of the first traffic actuated signal light in 1928.

Administrative Information

Acquisition Information

This collection was donated by Charles Adler, Jr.'s daughter, Mrs. Amalie Adler Ascher on September 15, 1989.

Processing Information

Processed by Don Darroch, volunteer, and Robert S. Harding, archivist, 1990.

Preferred Citation

Charles Adler, Jr. Collection, 1899-1980, Archives Center, National Museum of American History.

Restrictions

The collection is open for research.

Conditions Governing Use

Collection items available for reproduction, but the Archives Center makes no guarantees concerning intellectual rights. Archives Center cost-recovery and use fees may apply when requesting reproductions.

Biographical / Historical

Charles Adler, Jr. (1899-1980), a professional engineer and inventor was a life-long resident of Baltimore, Maryland. He began his career as an inventor at age 14, receiving a patent on an electric automotive brake. After attending Johns Hopkins University, he served briefly in the Army during World War I and worked at several jobs before being associated in 1919 with the Maryland and Pennsylvania Railroad, where he developed a series of safety devices. In 1928 he developed and installed in Baltimore the first traffic actuated signal light. In 1937 he became a consultant to

the Baltimore and Ohio Railroad, continuing to invent safety and signal devices for automobiles, trains and aircraft. He was granted over sixty United States patents. He was a licensed pilot and a member of numerous professional engineering societies. From 1953-1959, Adler served on the Maryland State Aviation Commission and he was a member of the Maryland Traffic Safety Commission from 1952 until his death in 1980.

Scope and Contents

The collection contains biographical information about Adler and his career. Materials relating to his professional activities include newspaper clippings, photographs and other memorabilia; his published writings include articles in periodicals and newspapers. In addition, there are patent applications, royalty receipts and correspondence, as well as lengthy descriptions of various safety devices Adler invented. Many photographs are not captioned, including images of devices Adler invented, as well as images of aircraft, automobiles, and trains. There are portraits of family members, Adler, and his associates.

Arrangement

The collection is arranged into six series.

Series 1, Biographical Material, 1899-1980

Series 2, Scrapbooks and Clippings, 1920-1989

Series 3, Correspondence, 1928-1975

Series 4, Patents and Inventions, 1929-1980

Series 5, Photographs and Scrapbooks, circa 1920-1930

Series 6, Publications, 1952-1980

Physical Characteristics and Technical Requirements

Gloves must be worn when handling unprotected photographs and negatives.

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- Aeronautics and state -- 20th century
- Engineers -- 1920-1980
- Inventions -- 20th century
- Inventors -- 20th century
- Railroads -- 20th century
- Traffic engineering -- 20th century
- Traffic signs and signals -- 1920-1980

Types of Materials:

- Clippings -- 20th century

Correspondence -- 20th century
Patent applications
Photographs -- 20th century
Receipts -- 20th century

Places:

Baltimore (Md.) -- 20th century

Container Listing

Series 1: Biographical Material, 1899-1980

Box 1, Folder 1	Birth certificate (copies), 1899 June 16
Box 1, Folder 2	"The Brownie," Park School Yearbook, 1917, 1914
Box 1, Folder 3	Honorable discharge from United States Army, 1918 December
Box 1, Folder 4	Marriage certificate, 1925 June 10
Box 1, Folder 5	Personal recognition statements and testimonials honoring Adler, 1941 - 1976
Box 1, Folder 6	Pilot's flight log; certificate of recordation, pilot certificate #171609; pilot certificate and ratings with limitations; medical certificate, student and private pilot, 1945, 1949, 1946, 1947
Box 1, Folder 7	Memoirs and other reminiscences by Charles Adler, Jr., 1968 - 1980
Box 1, Folder 8	Address books, 1969 - 1971
Box 1, Folder 9	Illuminating Engineering Society Directory (Maryland Section), 1971 - 1972
Box 1, Folder 10	State of Maryland professional engineer certificate, 1981 June 30
Box 1, Folder 11	Harry Adler, last will and testament, 30 January 1970
Box 1, Folder 12	"Adler's Album" (by Charles Adler, Jr.), undated
Box 1, Folder 13	Biographical sketches and obituaries on Adler, list of inventions
Box 1, Folder 14	Metal plaques and license tags, undated
Box 1, Folder 15	Miscellaneous ephemera, undated

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Series 2: Scrapbooks and Clippings, 1920 - 1989

Box 2, Folder 1	Clippings from newspapers and trade journals on Adler's invention of automobile traffic warning system for railroad grade crossings (also photos of the device); correspondence with individuals in railroad industry, 1920 - 1924
Box 2A, Folder 1	Handwritten notes, diagrams and news clippings on devices to control automatically the speed of cars approaching railroad crossings and other dangers through magnets imbedded in highway which would act on devices in cars to control speed, 1924 - 1927
Box 2A, Folder 2	News clippings, 1925
Box 2, Folder 2	News clippings, correspondence and photos on traffic signal actuated by sound of horn, 1926 - 1928
Box 3, Folder 1	News clippings, handwritten notes and correspondence on sonic traffic light control, 1927 - 1928
Box 3, Folder 2	News clippings, photographs on sonic traffic light, 1928 - 1929
Box 3A, Folder 1	News clippings, sonic and other traffic lights, 1928 - 1930
Box 3A, Folder 2	News clippings, double filament traffic signal and devices, 1930 - 1939
Box 3B	News clippings, traffic lights for color blind, 1931 - 1932
Box 4	News clippings, articles by Charles Adler on a variety of subjects, 1932 - 1978
Box 4	News clippings, "Adler's Album" a column which was a regular feature in the Baltimore Beacon, 1973 - 1974
Box 4, Folder 1	Unmounted clippings from newspapers and magazines on a variety of Adler's inventions and activities, 1928 - 1970
Box 4, Folder 2	Unmounted newspaper and magazine clippings on Adler and his work, 1971 - 1989
Box 4, Folder 3	Unmounted clippings on Adler and his work, undated
Box 5A, Folder 1-7	News clippings on inventions, correspondence, and advertisements, 1939 - 1946
Box 5A, Folder 8-11	News clippings, aircraft inventions; columns by Walter Winchell, Dorothy Kilgallen, and Earl Wilson, 1947 - 1951
Box 5B, Folder 1-2	News clippings, Walter Winchell, Cholly Knickerbocker columns and visit of King Carol (of Romania), 1952 - 1954

Box 5B, Folder 1-2

News clippings, "Adler's Album" column from Baltimore Beacon. Correspondence and photo prints honoring Adler, 1974 - 1977

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Series 3: Correspondence, 1928 - 1975

Box 6, Folder 1	Correspondence, 1928 - 1943
Box 6, Folder 2	Correspondence, 1954 - 1963
Box 6, Folder 3	Maryland Traffic Safety Commission, 1956 - 1971
Box 6, Folder 4	Institute of Traffic Engineers, 1965 - 1971
Box 6, Folder 5	Correspondence, 1965 - 1975
Box 6, Folder 6	Royalty statements, Union Switch and Signal to Adler, 1936 - 1952
Box 6, Folder 7	Grimes Manufacturing to Adler, 1949 - 1969

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Series 4: Patents and Inventions, 1917 - 1980

Box 7, Folder 1	Clock speedometer, 1970
Box 7, Folder 2	Disabled diverter, 1971 - 1972
Box 7, Folder 3	Landing indicator, 1930 - 1942
Box 7, Folder 4	Spaceometer, 1918 - 1955
Box 7, Folder 5	Spaceometer, 1956 - 1963
Box 7, Folder 6	Spaceometer, 1964 - 1966
Box 7, Folder 7	Spaceometer, 1967 - 1977
Box 8, Folder 8	Aircraft tail light, 1940 - 1957
Box 8, Folder 9	Various aircraft lights, 1929 - 1955
Box 8, Folder 10	Various aircraft lights, 1956 - 1978
Box 9, Folder 11	Aircraft collision avoidance, 1941 - 1963
Box 9, Folder 12	Aircraft collision avoidance, 1965 - 1980
Box 9, Folder 13	Aircraft collision avoidance Grimes Manufacturing Company, 1950 - 1960
Box 9, Folder 14	Aircraft lights, Grimes Manufacturing Company, 1965 - 1971
Box 10, Folder 15	Other aircraft patents, 1940 - 1974
Box 10, Folder 16	Automotive traffic control, 1925 - 1935
Box 10, Folder 17	Automotive traffic control, 1936 - 1955
Box 10, Folder 18	Automotive traffic control, 1956 - 1975
Box 11, Folder 19	Automotive devices, other, 1919 - 1979
Box 11, Folder 20	Railroad and other, 1917 - 1980
Box 11, Folder 21	Assignment of patents to United States Government, 1945 - 1973
Box 11, Folder 19	US Patent, 1,300,094, electrical brake, 1919 April 8

Box 11, Folder 20	US Patent, 1,394,264, crossing signals, 1921 October 18
Box 11, Folder 20	US Patent, 1,638,793, automatic time controls (railroad), 1927 August 9
Box 10, Folder 16	US Patent, 1,705,323, highway signal systems, 1929 March 12
Box 11, Folder 20	US Patent, 1,889,725, signal lamps, 1932 November 29
Box 10, Folder 16	US Patent, 1,919,874, traffic signals, 1933 July 25
Box 11, Folder 20	US Patent, 1,978,334, signals, 1934 October 23
Box 11, Folder 20	US Patent, 1,981,577, signals, 1934 November 20
Box 10, Folder 16	US Patent, 1,995,816, traffic signals, 1935 March 26
Box 10, Folder 16	US Patent, 2,015,612, traffic signals, 1935 September 24
Box 11, Folder 20	US Patent, 2,029,211, signals, 1936 January 28
Box 10, Folder 16	US Patent, 2,121,276, signals, 1938 June 21
Box 10, Folder 15	US Patent, 2,212,490, airplanes, 1940 August 27
Box 8, Folder 9	US Patent, 2,316,751, landing indicators, 1943 April 20
Box 8, Folder 9	US Patent, 2,311,921, flasher switches, 1943 February 23
Box 9, Folder 11	US Patent, 22,497 (reissue), signal lamps, 1944 June 20
Box 10, Folder 15	US Patent, 2,353,380, flight indicators, 1944 July 11
Box 9, Folder 11	US Patent, 2,365,038, signals, 1944 December 12
Box 8, Folder 10	US Patent, 2,365,504, reflector lamps, 1944 December 19
Box 8, Folder 9	US Patent, 2,447,302, position lights, 1948 August 17
Box 11, Folder 19	US Patent, 2,556,052, diverter lighting system, 1951 June 5
Box 8, Folder 9	US Patent, 2,605,384, aircraft position lamp, 1952 July 29
Box 8, Folder 9	US Patent, 2,881,307, undulating aircraft light, 1959 April 7
Box 9, Folder 11	US Patent, 2,832,059, airplane external lighting, 1958 April 22
Box 9, Folder 11	US Patent, 2,938,192, beacon lights, 1960 May 24

Box 9, Folder 11	US Patent, 3,183,480, anticollision lights (aircraft), 1965 May 11
Box 9, Folder 11	US Patent, 3,619,597, aircraft beacon, 1971 November 9
Box 10, Folder 16	US Patent, 85,143 (design), traffic signal facing, 1931 September 22
Box 10, Folder 16	US Patent, 92,055 (design), signal cover glass, 1934 April 24
Box 10, Folder 16	US Patent, 108,773 (design), signal cover glass, 1938 March 15
Box 11, Folder 20	Canadian Patent, 224,361, railway crossing signals, 1922 October 3

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Series 5: Photographs and Scrapbooks, circa 1920s-1930s

Box 12, Folder 1	Early Adler family and school photo prints
Box 12, Folder 2	Portraits of Charles Adler and others
Box 12, Folder 3	Aircraft
Box 12A, Folder 1	Automotive, classic cars
Box 12A, Folder 2	Automotive, other
Box 13, Folder 6	Railroad
Box 13, Folder 8	Miscellaneous photo negatives
Box 13, Folder 7	Unidentified devices

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Series 6: Publications, 1952 - 1980

Box 14	Institute of Traffic Engineers and other transportation publications, 1952 - 1980
Box 15	Congressional Record and other legislative publications, and miscellaneous publications, 1957 - 1975

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