



Smithsonian

National Air and Space Museum

1906 Automobile and Aero Clubs of America Joint Show Photographs

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2021

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Collection Overview

Repository:	National Air and Space Museum Archives
Title:	1906 Automobile and Aero Clubs of America Joint Show Photographs
Date:	January 13-20, 1906
Identifier:	NASM.XXXX.0902
Creator:	Beals, Jessie Tarbox
Extent:	0.5 Cubic feet (1 folder; 19 gelatin silver print photographs)
Language:	English .
Summary:	Sixteen photographs by Jesse Tarbox Beals of the aeronautical exhibits at the Automobile and Aero Clubs of America Joint Show held January 13-20, 1906, in the third-floor gymnasium of the 69th Regiment Armory, New York City.
Digital Content:	Image(s): NASM-9A18474: 1906 Automobile and Aero Clubs of America Joint Show

Administrative Information

Acquisition Information

A. Leo Stevens?, Gift, Unknown, NASM.XXXX.0902

Related Materials

[Early Aeronautical Newsclippings \(Alexander Graham Bell\) Collection, Acc. NASM.XXXX.0086](#) , Series 3: Photographs, [Bell Photo Album], <https://sova.si.edu/details/NASM.XXXX.0086#ref642> . This photo album contains 22 Jessie Tarbox Beals photographs of the 1906 show: the 16 views seen in this collection (NASM.XXXX.0902), plus four additional views of the Aero Club exhibits in the Armory gymnasium, and two views of the Aero Club exhibits in the Armory's Drill Hall.

The surviving 24 x 36 inch photographic prints used in William J. Hammer's display on the walls of the Armory gymnasium are located in the [William J. Hammer Collection, Acc. NASM.XXXX.0074](#) , Series 2.7: Very Large Format Materials [39 x 50 x 2 inch large format drawer], Very Large Format Mounted Copy Prints (Photographs), <https://sova.si.edu/details/NASM.XXXX.0074#ref825> .

NASM Artifacts Displayed at the Show

Langley Aerodrome Number 5, [A19050001000](#) ["Langley 1897 Aerodrome"].

Langley Quarter-scale Aerodrome, [A19050003000](#) ["Langley 1903 Aerodrome"].

Lilienthal Glider, [A19060001000](#) .

From *Santos-Dumont Airship No. 9*: Clement V-2 Engine, [A19080001000](#) .

Processing Information

Arranged, described, and encoded by Melissa A. N. Keiser, 2021.

Preferred Citation

1906 Automobile and Aero Clubs of America Joint Show Photographs, Acc. NASM.XXXX.0902, National Air and Space Museum, Smithsonian Institution.

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Biographical / Historical

The Aero Club of America (ACA) was the United States' oldest national aviation organization and is the mother organization from which all U.S. air sports organizations either directly, or indirectly, evolved. Founded in 1905, the ACA underwent reorganization in 1922, when it became the National Aeronautic Association (NAA). The club was the focal point of organized aviation in the U.S., and its early members were some of the most influential leaders in American science and industry. The ACA served United States aviation in a variety of roles and fostered the development of all forms of flight. It was the ACA, not the federal government, that began the practice of regulating flight safety by issuing flying licenses based on a demonstrated ability to competently operate a vehicle of the air. The ACA was also the first body of aviation experts in the U.S. to publicly endorse the efforts of the Wright Brothers and the club was instrumental in persuading Congress to fund military aviation.

In January 1906, seeking a larger venue for their Sixth Annual show, the Automobile Club of America chose the newly completed Sixty-ninth Regiment Armory building at 68 Lexington Avenue, between East 25th and East 26th Streets in lower Manhattan, New York City, and invited the newly-founded Aero Club of America (ACA) to participate. Visitors to the show would have found the Armory's massive Drill Hall filled with automobile exhibits, with two full-sized ACA balloons and an airship hanging overhead. The main ACA exhibit was housed in the Armory's two-story high gymnasium on the third floor of the administration section of the building. Suspended overhead were kites, balloons, balloon baskets, gliders, airships (all but one displayed with deflated envelopes), and various gliding and powered model aircraft; at floor level were engines, additional balloon baskets and fittings, and tables displaying instruments, literature, and a U.S. Patent Office exhibit of flying machine models dating from 1878 to 1889. At the south end of the room, Israel Ludlow's massive towed-glider flying machine (a man-carrying kite design) was displayed standing on end, as it was too large to display in flying configuration. Other aircraft on display included the Langley Aerodrome Number 5 ("Langley 1897 Aerodrome"), the Langley Quarter-scale Aerodrome ("Langley 1903 Aerodrome"), the Lilienthal (Otto) 1893 Glider, Hargrave (Australia) 1888 Compressed-Air Ornithopter, Herring 1902 Gasoline Biplane Model, Herring-Arnot 1897 Glider, Chanute (Octave) 1896 Biplane Glider, Pichancourt Model Ornithopter (1879), Keil 1905 Ballo-plane, Dr. Julian P. Thomas' airship, Alberto Santos-Dumont's airship No. 9 airship "La Baladeuse" (1903), Thomas Baldwin's airship "California Arrow," kites and weather balloons from the Blue Hill Observatory in Massachusetts, and balloons from Carl E. Myers, Maurice Mallet, and A. Leo Stevens. Alexander Graham Bell displayed a number of tetrahedral-cell kite designs in varying sizes, ranging from a 4-cell design to the 1300-cell "Frost King" kite. The walls of the room were decorated with a large number of photographs, including over 120 enlargements provided by consulting electrical engineer and aeronautical enthusiast William J. Hammer (predominantly views taken by Hammer in Paris, France, during the balloon competitions which were part of the 1900 Exposition Universelle), photographs loaned by fellow ACA member George Grantham Bain, and photographs provided by exhibitors and other ACA members including Carl E. Myers and John Brisben Walker. The show officially opened to the public at 8:00 p.m. on Saturday, January 13, 1906, although members of the Aero Club were allowed to enter earlier at 4:00 p.m. Additional photographs (and possibly other of the gymnasium exhibit items) were installed later

that night after the show had opened. The show concluded with a banquet on the evening of Saturday, January 20, 1906.

Jesse Tarbox Beals (1870-1942) was one of the first female news photographers. In late 1902, Beals had been hired as a photographer by the editor of *The Buffalo Inquirer* and *The Courier* in Buffalo, New York; two years later, the papers sent her on assignment to St. Louis, Missouri, to photograph the Louisiana Purchase Exposition. Hard-working and tenacious, Beals was soon providing her photography of the Fair to other major publications including the *New York Herald*. In 1905, Beals moved to New York City, and opened a studio at 159 Sixth Avenue in Lower Manhattan.

Scope and Contents

This collection consists of sixteen black and white photographs taken by photographer Jesse Tarbox Beals of the aeronautical exhibits at the Automobile and Aero Clubs of America Joint Show held January 13-20, 1906, in the third-floor gymnasium of the 69th Regiment Armory, New York City. Four duplicate prints are included in the collection for a total of 20 prints overall. The 13 mounted prints in the collection are embossed with Beals' name and studio address at the lower right corner; the unmounted prints have Beals' ink stamp on the reverse. All of the photographs were likely made during the day on Saturday, January 13, 1906, before the show opened to the public that evening. Some of the exhibits are seen in the midst of installation, notably the tetrahedral-cell kite designs of Alexander Graham Bell. In view 3, Bell and several of his associates (including Lewis Howard Latimer) can be seen posing with the kites for the camera; view 4 is a portrait of Bell alone.

Arrangement

The photographs are arranged as if the photographer is moving around the exhibit space in a clockwise direction, starting and ending at the entrance from the Armory's south staircase at the southeast corner of the room.

Bibliography

"Auto vs. Airship: Speed Merchants of Earth and Ether at Armory Show." *New York Tribune*, January 13, 1906, 10.

"BALLOONS THE FEATURE OF ARMORY AUTO SHOW; Aero Club's Exhibit Novel and Interesting to Big Crowd. AIRSHIPS HANG FROM ROOF New Quarters of Sixty-ninth Regiment Filled with Motor Cars -- Handsome Decorations." *New York Times*, January 14, 1906, 10.

"Auto Club Show Open: Attractive Display in New New York Armory." *Washington Post*, January 14, 1906, S1.

"The Aero Club of American's Exhibit of Aeronautical Apparatus." *Scientific American*, Vol. XCIV, No. 4, January 27, 1906, 93-94.

Myers, Carl E. "A Visit to the First Show of the Aero Club of America." *Scientific American Supplement* No. 1572, February 17, 1906, 25193-25194; via Library of Congress Manuscripts Division, Wilbur Wright and Orville Wright papers, 1809-1979, Series: Scrapbooks, Scrapbooks; January 1902-December 1908: page 0100, "A Visit to the First Show of the Aero Club of America [Carl E. Myers, *Scientific American Supplement* No. 1572, 17 February 1906]." <https://www.loc.gov/resource/mwright.05001185>

Brannan, Beverly W. "Jessie Tarbox Beals (1870-1942): Biographical Essay." Library of Congress, Prints & Photographs Division, January 2011. <https://loc.gov/rr/print/coll/womphotoj/bealsessay.html>

Names and Subject Terms

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

Subjects:

- Aeronautics
- Aeronautics -- Exhibitions
- Airships -- 1900-1910
- Balloons -- Exhibitions
- Kites
- Langley Aerodrome No 5 (1895-96)

Types of Materials:

- Photographs

Names:

- Aero Club of America
- Bell, Alexander Graham, 1847-1922

Container Listing

Photographs of the Automobile and Aero Clubs of America Joint Show, January 13, 1906

Notes: Views of Aero Club of America aeronautical exhibits at the Automobile and Aero Clubs of America Joint Show, in the third-floor gymnasium of the 69th Regiment Armory, New York City, January 13, 1906.

[View No. 1: Looking south from center of west wall \(Maurice Mallet Exhibit\)](#)

Notes: View from midway along the west wall, looking south toward the southwest corner of the room. The Maurice Mallet exhibit (balloon basket) is at center; items from the Blue Hill Observatory (Massachusetts) are suspended above the Mallet exhibit and include a small weather balloon, several kites, and (at right) "Hargrave's Cellular Kite." Structure at left background is Israel Ludlow's towed-glider flying machine displayed standing vertically on its nose.

[View No. 2: Bell Tetrahedral Kites](#)

Notes: At center are several of Alexander Graham Bell's tetrahedral cell kites (including "The Oionos"). Man posed at left near U.S. Weather Bureau sign is engineer and inventor Lewis Howard Latimer, who had worked for Bell previously.

[View No. 3: Alexander Graham Bell with Bell Tetrahedral Kites](#)

Notes: Alexander Graham Bell (center) poses seated, in front of two of his large tetrahedral cell kites (including "The Oionos"); note one of Bell's associates (right) posed standing on a section of tetrahedral cells to demonstrate their strength. Man posed second from left, between Bell kites, is engineer and inventor Lewis Howard Latimer, who had worked for Bell previously.

[View No. 4: Alexander Graham Bell](#)

Notes: Informal portrait photograph of Alexander Graham Bell posed seated, with one of his large tetrahedral cell kites in the background.

[View No. 5: Looking north from center of west wall](#)

Notes: Models loaned by the U.S. Patent Office are visible in the foreground; hanging over the cases are (front to back) the Santos-Dumont (Alberto) No. 9 "La Baladeuse" airship, Hargrave (Australia) 1888 Compressed-Air Ornithopter and Herring 1902 Gasoline Biplane Model, and the 1897 steam-powered Langley Aerodrome Number 5.

[View No. 6: Looking southeast from center of west wall](#)

Notes: Closest to the viewer are Samuel P. Langley's two Aerodrome models: at left, the Langley Quarter-scale Aerodrome, and at top center, Langley Aerodrome Number 5. Hanging at center above the men inspecting a small patent model are the Herring 1902 Gasoline Biplane Model (left) and the Hargrave (Australia) 1888 Compressed-Air Ornithopter (right). Hanging behind these are the frames of Thomas Baldwin's "California Arrow" airship (left) and the Santos-Dumont (Alberto) No. 9 "La Baladeuse" airship (right, with wicker basket for pilot). At the far end of the room, both hanging and on the floor, are several of Alexander Graham Bell's tetrahedral kites.

[View No. 7: West wall from northwest corner \(William J. Hammer photography display\)](#)

Notes: A wall of photographs from the collection of William J. Hammer (bottom row) and others; an Alexander Graham Bell tetrahedral kite design is seen suspended at far left background.

[View No. 8: Looking northeast from center of west wall \(Patent Office display\)](#)

Notes: Models loaned by the U.S. Patent Office are seen at floor level in the foreground; hanging above are (left to right), Langley Aerodrome Number 5, Hargrave (Australia) 1888 Compressed-Air Ornithopter, and the tails of the Baldwin and Santos-Dumont airships. Hanging in background are the Herring-Arnot 1897 Glider (left) and, at center, the Herring 1902 Gasoline Biplane Model.

[View No. 9: Badgley and Ritchel Patent Models](#)

Notes: Patent models on display; left to right: Badgley Aerial Machine by Henry Badgley, patent no. 214,546, patented April 22, 1879; C. F. Ritchel Flying-Machine by Charles F. Ritchel, patent no. 201,200, patented March 12, 1878.

[View No. 10: Airship and Spalding Patent Models](#)

Notes: Patent models on display, left to right: unidentified airship; R. J. Spalding Flying Machine, human-powered ornithopter design by Reuben James Spalding, patent no. 398,984, patented March 5, 1889.

[View No. 11: Northeast corner from center](#)

Notes: The Lilienthal (Otto) 1894 Glider can be seen hanging on the left and a display of photographs loaned by William J. Hammer (bottom row) can be seen in the background. At right foreground is the Wright Brothers 1903 engine (4-cylinder inline).

[View No. 12: Herring 1902 Gasoline Biplane Model](#)

Notes: Close-up view, from below, of Augustus M. Herring's 1902 Gasoline Biplane Model. Sign suspended below the glider reads: "HERRING, DEC. 1902. This model has made more

than 30 flights upward of a mile in length, the longest flight 15 miles failed only by the fuel supply. The carrying capacity is sufficient to keep the model in flight for upwards of 200 miles. The driving power is a Gasoline engine Wt. 2 lbs. Weight of entire model 7 lbs. Power consumed in flight, .07 H.P. Maximum power of engine, .51 H.P."

[View No. 13: Looking south from north end](#)

Notes: Exhibit items from A. Leo Stevens are seen at floor level in foreground (ballon basket and engine); overhead are the Langley Quarter-scale Aerodrome (left) and Langley Aerodrome Number 5 (right). The Baldwin and Santos-Dumont airships are seen end-on at center. [Ghostly images of men moving about the room during the long exposure required to make this photograph are particularly visible at left.]

[View No. 14: Looking southwest from center of east wall](#)

Notes: Charles Edgar "Carl" Myers is shown seated at a table that displays an electric signaling apparatus designed by William J. Hammer. Thomas Baldwin's "California Arrow" airship is displayed hanging from the ceiling along with models loaned by W. R. Kimball.

[View No. 15: Southeast corner from center of east wall \(Kiel Ballo-plane\)](#)

Notes: Three-quarter left front view from below of the Keil Ballo-plane, an electric powered airship designed by W. M. Keil of Tuxedo Park, New York.

[View No. 16: Southeast corner of east wall \(Kites and Thomas Airship\)](#)

Notes: A display of Blue Hill Box Kites patented by H. H. Clayton, Eddy War Kites patented by William A. Eddy, and the envelope (deflated) and frame of an airship belonging to Dr. Julian P. Thomas. Ballooning photographs taken by William J. Hammer at the 1900 Exposition Universelle in Paris, France, are displayed on the wall below.