

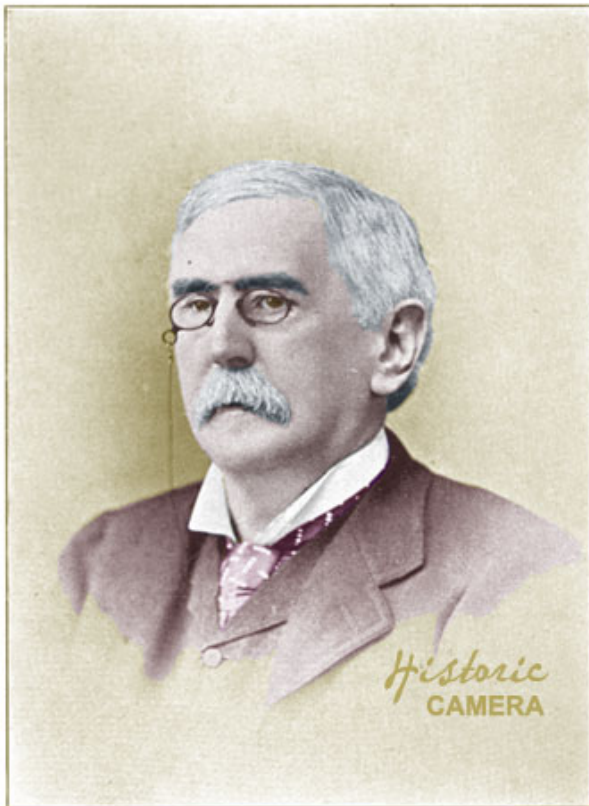


Historic Camera Club Newsletter

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M. Carey Lea **(Photographic Chemist, Author)**



M. Carey Lea.

Matthew Carey Lea was born to Isaac and Frances Carey Lea in Philadelphia on August 18, 1823. An old Quaker family, the Leas accompanied fellow Quaker William Penn to America in 1700. His father was a naturalist and publisher and his mother was an important political writer, but their frail young son saw little of the outside world in his early years. His delicate medical condition prohibited public schooling, and his education was placed into the

accomplished hands of private home tutors. M. Carey Lea studied along side his brother Henry Charles Lea in the early years, who was later regarded in the late nineteenth century as one of greatest scientific historians. After receiving his legal degree in 1847, continued health problems prevented Mr. Lea from pursuing a career in law.

Following a rejuvenating trip to Europe, he began working in Professor James C. Booth's laboratory, and Mr. Lea's fascination with scientific research continued in his own home laboratory in the Philadelphia suburb of Chestnut Hill. He married his cousin, a young widow named Elizabeth Lea Jaudon on July 14, 1852, and the couple had a son, George Henry Lea. After his wife's death, he married Eva Lovering, the daughter of a Cambridge, Massachusetts professor. Professionally, Mr. Lea became fascinated with chemistry as it pertained to the art of photography. He published the landmark *Manual of Photography* in 1868, which is still in print.

In the 1880s, Mr. Lea began experimenting with what he dubbed 'photo-salts,' first writing about silver haloids and their coloring changes when combined with certain chemicals in 1885. He noted how the silver salt and coloring phenomenon was similar to the lake formations aluminum oxide undergoes in a similar process. Four years' later, he made the discovery for which he is most famous - that silver can exist in three allotropic states that are light sensitive. The first state is allotropic silver proper, which may be either soluble or insoluble in water, can have almost any color but its insoluble variation always displays characteristics of plasticity. The intermediate second state may be either yellow or green in color, exhibits metallic characteristics, and never displays plasticity or notable chemical differences. The third state is silver. While his allotropic silver discoveries received universal critical acclaim at the time, technical and scientific advances have disproven the validity of many of Mr. Lea's conclusions.

His ongoing health problems made an active lifestyle impossible, and Mr. Lea was reduced to an ascetic existence, going out little and receiving few visitors.

In his early manhood he experienced an accident in his laboratory which damaged one eye requiring its removal in later years. However, due to his intellect and means, Mr. Lea was able to become associated with a few scientific organizations, and his primary involvement was with the chemistry section of Philadelphia's Franklin Institute. He was also elected to membership in the National Academy of Sciences in 1892 where he published fifty-four substantial papers. M. Carey Lea was a prolific writer. He authored numerous articles that appeared in all of the major photographic trade magazines including the British Journal, Amateur photographer, photographic news, and the list goes on.

His health further declined after prostate surgery, and seventy-three-year-old Matthew Carey Lea died at his Chestnut Hill home on March 15, 1897. Not surprisingly, he bequeathed his books and scientific instruments to the Franklin Institute. Despite the subsequent critical backlash over his findings, his groundbreaking research has nevertheless earned Mr. Lea an indisputable reputation as the founder of photochemistry.

Ref:
1897 The American Journal of Science, Vol. CLIII (New Haven, CT: Tuttle, Morehouse, & Taylor Press), p. 428.

2003 Bulletin for the History of Chemistry (Cincinnati, OH : Division in collaboration with the Oesper Collection in the History of Chemistry of the University of Cincinnati, and with assistance from the Beckman Center for the History of Chemistry), pp. 26-34.

1905 National Academy of Sciences Biographical Memoirs, Vol. V (Washington, DC: National Academy of Sciences), pp. 155-208.

1917 The Nature of Solution (New York: D. Van Nostrand Company), p. 230.

John J.E. Mayall

Born in Oldham, Lancashire, England reportedly on September 17, 1813, Jabez Meal was the son of chemist John Meal and his wife Elizabeth. Details on his early life are few, and it is believed he joined his father in the West Yorkshire linen industry when he was in his twenties. In 1834, he married young Eliza Parkin, daughter of Star Inn proprietor Joseph Parkin. After his father-in-law died, Mr. Meal ran the Star Inn, and took an active interest in his customers, teaching them arithmetic as well as educating them in both English and Latin.

Seeking more lucrative employment in the United States, Mr. Meal, his wife, and their growing family relocated to the United States, settling in Philadelphia in 1842. This is when he became known professionally as John Jabez Edwin Mayall. He

became associated with University of Pennsylvania chemist Dr. Paul Beck Goddard, who at the time served as a technical adviser to local photographic pioneer Robert Cornelius and conducting experiments to improve the daguerreotype process. With Dr. Goddard's assistance, Mr. Mayall learned about the science of photography; he experimented with photographic art in the studio he opened at 140 Chestnut Street. During this productive period, he created a series of ten daguerreotypes portraying The Lord's Prayer and detailed illustrations of William Shakespeare's Hamlet, Macbeth, and Thomas Campbell's evocative poem, "The Soldier's Dream."



After selling his studio to daguerreotypist and author Marcus Aurelius Root, Mr. Mayall returned to London in 1846, with his first studio (from 1847-1855) located at 433 Strand. He further experimented with daguerreotyping and photographic processes, applying the collodion process to copy and enlarge daguerreotypes. He resisted coloring daguerrotypes out of concern that the necessary chemicals would taint the permanent image. He also became known for his technical innovations, which included a supported disc with a star-shaped hole that revolved between the camera and the object being photographed capable of producing a photographic reproduction of a vignette portrait.

An important turning point in Mr. Mayall's career occurred in May 1851 when the Great Exhibition of

the Art and Industry of All Nations opened in London. There, he exhibited several of his daguerreotype illustrations including The Lord's Prayer, and met Prince Albert, who became his most important patron. Despite Albert's encouragement, Mr. Mayall decided to discontinue artistic photography and focus solely upon its commercial aspects. He began producing profitable portrait carte-de-visites of celebrities, and took out a patent in 1855 for "Artificial Ivory for receiving photographic pictures" which he developed. Mr. Mayall also became an active member of the Photographic Society of London, and in addition to photographing the British royal family regularly, he also became photographic advisor to military officials who were assigned to photograph the Crimean War. His expanding business required opening another studio at 224 Regent Street in 1853, which grew to include 226 Regent Street three years' later. He enjoyed publication success as well with Illustrated News of the World in 1858 and the Royal Album compilation of 14 carte-de-visites of Queen Victoria and her family in 1860. His celebrity clientele included statesmen William Ewart Gladstone, Lord Derby, and Lord Brougham.

Mr. Mayall returned to Brighton in 1864, and after becoming widowed, married Celia Victoria Hooper, with whom he had two daughters. He also became active in Brighton politics, serving as councillor (1871), Alderman (1874) and Mayor (1877-1878) respectively. He also received such honors as being named a fellow of the Royal Institution (1864) and of the Chemical Society (1871). The curtain fell an illustrious six-decade career when eighty-seven-year-old John Mayall died on March 6, 1901.

Ref:
1986 A Concise History of Photography (Don Mills, Ontario, Canada: General Publishing Company, Ltd.), p. 73.

2007 Encyclopedia of Nineteenth-Century Photography, Vol. I (New York: Routledge/Taylor & Francis Group LLC), pp. 907-909.

2002 John Jabez Edwin Mayall (1813-1901) (URL: <http://www.spartacus.schoolnet.co.uk/DSmayall.htm>).

2012 Portraits of Charles Dickens (1812-1870) (URL: <http://www.photohistory-sussex.co.uk/DickensCharlesPortraits.htm>).

James W. Black

James Wallace Black was born to a carpenter and his wife in Francestown, New Hampshire on February 10, 1825. Orphaned while still in his teens, the boy took work

wherever he could find it – in a tannery in Lowell, Massachusetts and then in a cotton mill – before becoming a daguerreotype apprentice at John A. Lerow's Boston studio during the 1840s. After spending a few years as an itinerant photographer, he became a machine operator and plate polisher at L. Hale & Company in Boston. After a brief partnership with Loyal M. Ives, Mr. Black became John Adams Whipple's apprentice in 1850, and quickly established himself as an expert in the new crystalotype technique.



Mr. Whipple rewarded his talented pupil by making him a partner in his business, which operated as Whipple & Black from 1856 until 1859. During this period, Mr. Black honed his portrait skills, and while he was personally more interested in photographic composition and the manipulation of positive and negative space, he became professionally known for capturing the emotional essence of his subjects in natural poses. Utilizing the crystalotype process he

perfected, Mr. Black received critical praise for his New Hampshire landscape photographs. According to art historian Sally Pierce, what sets these landscape views apart are their textural characteristics that mirror the rustic terrain of the region. Also at this time, Mr. Black began experimenting with astronomical photography at the Harvard Observatory.

For reasons that remain unclear, Whipple & Black ended their partnership in 1859. That same year, Mr. Black married Frances Georgianna Sharp, and of their children, daughter Olive born in 1861 and son Otis Fisher born in 1867 survived to adulthood. To support his growing family, Mr. Black partnered with daguerreotypist Perez M. Batchelder and purchased J. B. Heywood's studio in 1860. The company soon became known for stereo views, cartes-de-visite, and portraiture. Mr. Black's photograph of abolitionist John Brown now resides in the Smithsonian Institution's National Portrait Gallery, and in 1860 made the now famous portrait of poet Walt Whitman.

Also in 1860, Mr. Black experimented with aerial photography, but encountered numerous problems developing wet collodion plates from the balloon's basket. However, in October of that year, he was successful in photographing downtown Boston in the "Queen of the Air" balloon owned and navigated by Samuel A. King. Of the eight plates made at 1,200 feet, one successful print, "Boston as the Eagle and Wild Goose See It", was produced. Impressed with the result, the Union Army began using aerial photography during the Civil War. At around this time, Mr. Black also began utilizing a porcelain that was acclaimed by his colleagues (including John Adams Whipple) for its delicate qualities and durability.

J. W. BLACK,
PHOTOGRAPHER,
No. 173 Washington Street,
BOSTON.

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The negatives, or first impressions, of all sitters are preserved, and duplicates can be procured at any time.

After dissolving his partnership with Mr. Batchelder in 1862, Mr. Black enjoyed solo success before partnering with John G. Case from 1864 until 1867. In 1872, Mr. Black captured views of the Great Boston Fire, which were published nationally, and he sold more than 150 small and large albumen prints, which sold for \$1.50 and \$3.00. In his later years, Mr. Black operated as Black & Company, and concentrated primarily upon producing lantern slides. He was an active member of the National Photographic Association and a founder of the Boston Photographic Union (renamed the Boston Photographic Association). J. W. Black contracted pneumonia and died in Cambridge, Massachusetts on January 5, 1896. His son Otis operated the studio until it closed in 1901. Mr. Black's photographs can currently be found at several locations including the Boston Public Library, the Boston Athenaeum, and the George Eastman House.

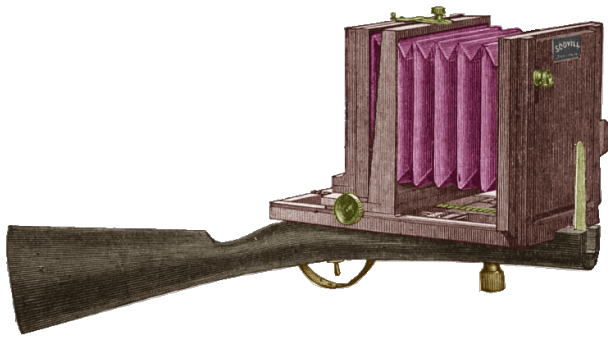
Ref:
2012 Catchers of the Light (Paphos, Cyprus: Stefan Hughes), p. 360.

1984 Culture and Record: Nineteenth Century Photographs from the University of New Mexico Art Museum (Madison, WI: The Regents of the University of Wisconsin System), p. 23.

2008 Encyclopedia of Nineteenth-Century Photography, Vol. II (New York: Routledge/Taylor & Francis Group LLC), pp. 164-165.

2010 Faneuil Hall (Boston Public Library Print Department). (URL: http://www.flickrriver.com/photos/boston_public_library/5352268413/).

Benjamin W. Kilburn



Benjamin West Kilburn was the first child born to iron foundry manager Josiah and his wife Emily Bonney in Littleton, New Hampshire on December 10, 1827. at age 16, Benjamin along with his younger brother Edward embarked upon a three-year foundry apprenticeship in Fall River, Massachusetts. Afterwards, the brothers returned home to join their father's thriving business. On November 16, 1853, Mr. Kilburn married Caroline Burnham, and the couple later had a daughter they named Elizabeth. In 1862, he joined his brother Edward to enlist in the Civil War, and for the next two years served in Company D of New Hampshire's 13th Regiment.

In 1865, Mr. Kilburn and his brother formed a business partnership and opened Kilburn Brothers, a firm that specialized in stereographic views and publishing. At first, Edward was the chief photographer, but soon his older brother assumed the primary role. Most of their rural stereographs featured the White and Franconia Mountains, and soon became popular not only in New Hampshire but throughout the United States. Within the next few years, their landscape views were being sold worldwide, which necessitated construction of a downtown Littleton factory that also included a first-floor sales showroom. Under Mr. Kilburn's leadership, a state-of-the-art stereographic manufacturing operation was created that employed mostly female laborers who performed a variety of functions including pasting and cutting prints and albumen paper sensitization. Male employees occupied supervisory positions and also worked as photographers and printers. An even larger Littleton facility opened on Cottage Street in December 1873. This building had a lengthy southern exposure that generated greater natural lighting. This factory produced up to 1,800 stereo views daily, at a cost of \$2 for 12 views.

After Edward Kilburn's retirement in February 1875, his brother changed the business name to B. W. Kilburn Company. While overseeing production, Mr.

Kilburn continued acting as principal photographer, taking stereographic views of the Mount Washington Steam Railway Company's cog railroad, learning how to manipulate his camera to emphasize the track's sharp angle. By emphasizing foreground, he was able to achieve impressive three-dimensional characteristics in his stereo views of Canada, Mexico, Europe, and Mexico. At the same time, Mr. Kilburn became a pioneer of photojournalism, photographing such events as the presidential inauguration of Grover Cleveland, the Johnstown, Pennsylvania Flood, the Boer War, the Boxer Rebellion, and the Spanish-American War.

In addition to taking photographs, he also expanded his company's inventory of negatives purchased from his competitors including the stereo views of Yosemite and Niagara Falls taken by Boston-based stereographic manufacturer John P. Soule. At the height of his success, Mr. Kilburn's factory produced 600,000 stereographic views yearly, and by 1904 employed more than 100 men and women. To further enhance the three-dimensional qualities of his landscape views, he invented a gun camera to eliminate the need for a tripod that could be overturned easily in such rugged terrain.

Benjamin W. Kilburn's active lifestyle was halted by a paralyzing stroke that left him permanently disabled until his death on January 15, 1909. The B. W. Kilburn Company closed shortly thereafter, and ironically, most of their their equipment and negatives were sold to its chief competitor, the Keystone View Company. Today, some of Mr. Kilburn's negatives and ledgers can be found in a collection at the California Museum of photography and several thousand of his stereo views were bequeathed to the Littleton New Hampshire Public Library.

Ref:

1886 Dry Plate Making for Amateurs (New York: Scovill Manufacturing Company), p. 50.

1883 Granite State Monthly (Boston: John N. McClintock), p. 63.

2012 Kilburn, Benjamin West (1827-1909) and Edward (1830-1884) (URL: <http://dating-au.com/kilburn-benjamin-west-1827-1909-and-edward-1830-1884>).

1883 The Photographic Times, Vol. XIII (New York: Scovill Manufacturing Company), pp. 477-478.

New Camera Listings:

EDWARD G. CONE, Manufacturer,
811 Champlain Bldg., CHICAGO, ILL.
E. & H. T. ANTHONY & CO., 591 Broadway, N. Y.,
Eastern Trade Agents.
CALIFORNIA CAMERA CO., 22 Geary St., San Francisco,
Pacific Coast Agents.

[Edward G.
Cone Co.](#)



Frederick Gutekunst

[Frederick Gutekunst](#)



Chicago Camera
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Standard
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New Biographies



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admin@historiccamera.com.

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