



Photography (1553-1996)

The development of still photography from a single chemical plate to the invention of digital cameras.

1553

Giambattista della Porta, Italian inventor, improved the camera obscura.

1558

Giovanni Battista della Porta, Italian artist, published his 'Natural Magic', the first published account of the use of the camera obscura as an aid to artists.

1560

The portable camera obscura allows precise tracing of an image in Italy.

1727

Johann Heinrich Schulze discovers and experiments with the darkening action of light on mixtures of chalk and silver nitrate (1725-1727)

1760

Tiphaigne de la Roche predicts photography in 'Giphantie'

1777

Carl Wilhelm Scheele proves ammonia stabilizes darkened silver salts

1786

Gilles-Louis Chrétien develops the Physionotrace for profile portraits

1802

Thomas Wedgwood, following the experiments of Schulze and Scheele, produces silhouettes by use of silver nitrate but is unable to fix the images

1806

William Hyde Wollaston invents the camera lucida

1807

The camera lucida improves image tracing.

1816

Joseph Nicéphore Niépce's attempts at photography he called heliography (sundrawing). He records a view from his workroom window using an 8 hour exposure on paper sensitized with silver chloride, but he is only partially able to fix the image.



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1816

The single-wire telegraph is introduced.

1819

Sir John Herschel discovers the photographic fixative, hyposulfite of soda.

1822

Niépce succeeds in obtaining a photographic copy of an engraving superimposed on glass

1826

Niépce achieves his first photographic image with a camera obscura (1816-1826)

1826

The invention of the Thaumatrope, a 'persistence of vision' toy, is credited to John Ayrton Paris

1826

Niépce, using a camera, makes a view from his workroom window on a pewter plate

1827

Charles Wheatstone describes a moving shutter

1829

Daguerre joins Niepce to pursue photographic inventions.

1829

Niépce and Louis Jacques Mandé Daguerre form a 10-year partnership to develop photography

1832

Joseph Plateau builds the Phenakisticope, an optical toy, that creates the illusion of movement by mounting drawings on the face of a slotted, twirling disk

1832

Wheatstone invents a non-photographic stereoscopic viewing device

1833

William Henry Fox Talbot begins experimenting with photogenic drawings



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1835

Joseph Niepce and Louis Daguerre produced the first daguerreotype photograph.

1835

Talbot photographs window at Lacock Abbey

1837

Louis Jacques Mandé Daguerre creates his first daguerreotype. He cut exposure times to 20 minutes.

1838

In England, Wheatstone's Stereoscope shows pictures in 3-D.

2 Jan 1839

French photographer Louis Daguerre takes the first photograph of the Moon.

1839

Fox Talbot in England begins producing photographs from negatives.

1839

Herschel invents photographic hypo fixative.

1839

The Daguerrotype photo process announced at French Academy of Science.

1839

John Herschel takes the first glass plate photograph.

1839

The daguerreotype is publicly announced at the Academy of Sciences in Paris

1839

Hippolyte Bayard produces direct-positive photographic images on sensitized paper.

1839

Giroux Daguerreotype camera is introduced it is the first commercially-manufactured camera



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1839

Alexander Wolcott receives first American patent in photography for his camera

1839

The Petzval photographic lens is introduced.

1840

John W. Draper of New York invents astronomical photography and makes the first US celestial photograph of the Moon.

1840

Alexander Wolcott patents Photographic Process.

1840

Draper takes first successful photo of the Moon (a daguerrotype).

1841

Petzval of Austria builds an f/36 photographic lens.

1841

William Henry Talbot patents the Calotype photographic process.

1843

The photographic enlarger is invented in the US.

1843

Anna Atkins produced the first photographically illustrated album 'British Algae: Cyanotype Impressions'

1844

Talbot publishes 'Pencil of Nature'

1845

H.L. Fizeau and J Leon Foucault take the first photo of Sun.

1845

Mathew Brady begins to photograph famous persons of his time, including Daniel Webster, Edgar Allan Poe, James Fenimore Cooper



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1846

In Germany, Zeiss begins manufacturing lenses.

1847

Louis Désiré Blanquart-Evard improves Talbot's Calotype process and sets up a photographic printing establishment

1848

James K Polk became the first US President to be photographed in office (by Matthew Brady).

1848

Claude Felix Abel Niépce de Saint-Victor uses albumen on glass plates for negatives

1849

The photographic slide is invented.

1849

William Bond obtains the first photograph of Moon through a telescope.

1849

Portrait photography studies by D.O. Hill and Robert Adamson (1840-1849)

1849

Maxime Du Camp travels to Egypt to photograph monuments

1850

Mathew Brady publishes a collection entitled 'A Gallery of Illustrious Americans'

1850

Albumen printing paper is introduced by L. D. Blanquart-Evrard

1851

In Britain, Talbot makes first instantaneous photographs using electric spark illumination with a 1/100000 second exposure.

1851

Frederick Scott Archer publishes wet-collodion photographic process (the 'wet plate' process).



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1852

Talbot patents photoglyphic engraving which produces printable steel plates

12 Jul 1854

George Eastman was born in Marshall, NY

1854

Disderi patents carte-de-viste portraiture which simplifies photography.

1854

Ambrotype, a positive collodion photographic image, is patented in the US.

1855

Ferrotypes photographic process (tintypes) is introduced to US.

1856

Poitevan starts photolithography.

1856

The Tin-type camera is patented by Hamilton Smith of Gambier, Ohio.

1856

Photojournalism of Crimean War documented by Roger Fenton, James Robertson, and Carol Popp de Scathmari.

1856

Alexander Parkes, years before its photographic potential was realized, invented celluloid as a 'transparent support for sensitive coating', but he never was able to use it photographically.

1857

Scott's phonograph is a forerunner of Edison's phonograph in France.

1857

Frederick Laggenheim takes first photo of a solar eclipse.

1857

In Britain, photographer Oscar Rejlander creates allegorical multiphoto compositions.



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1858

Donati's comet becomes the first to be photographed.

1858

Francis Frith photographs scenes from Upper Egypt and Ethiopia

1858

Henry Peach Robinson's photograph 'Fading Away' establishes him as a chronicler of the Victorian scene with multiple negative compositions of a life near its end

1859

The wide-angled lens first appears on cameras.

1859

Sutton panoramic camera is patented

1860

The first aerial photo in the US is taken from a balloon over Boston.

1860

Abraham Lincoln is photographed during his first presidential campaign by Mathew Brady

1860

Nadar photographs Paris from a balloon

1861

Francois Willeme opens a photosculpture studio in Paris

1861

Oliver Wendell Holmes invents popular stereoscope viewer

1861

James Clerk Maxwell's writes 'On the Theory of the Three Primary Colours'

1861

Chambre Automatique de Bertschis the first sub-miniature camera



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1863

A patent granted for a process to make color photographs.

1863

The photograph 'The Sharpshooter' by Alexander Gardner was taken after the Battle of Gettysburg.

1864

Julia Margaret Cameron begins to photograph soft and impressionistic portraits that challenge the accepted ideas of focus

1864

Joseph Wilson Swan perfects the carbo process

1865

Mathew Brady, Alexander Gardner, and others document the American Civil War (1861-1865)

1865

Dubroni-In-Camera processing was developed where the plates were sensitized, developed, and fixed within the camera inside a glass bottle that was part of the camera body

1866

The Woodburytype photographic process is patented.

1868

Louis Ducos du Hauron patents trichrome color photographic process.

10 May 1869

The photograph 'A Golden Spike for the Transcontinental Railway' was taken by Andrew J. Russell

1869

The subtractive method was introduced for colour photography.

1869

Louis Ducos du Hauron's 'Colors in Photography' describes the principle of color photography



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1870

Richard Leach Maddox invents the gelatin dry plate silver bromide process

1871

During the Siege of Paris, pigeons are used to carry microphotographed messages across enemy lines (1870-1871)

1872

Henry Draper invents astronomical spectral photography and photographs the spectrum of Vega.

1872

John W. Hyatt begins manufacturing celluloid.

1873

The term is 'Celluloid' registered as a trademark.

1873

First photo is reproduced by the halftone method

1873

Hermann Wilhelm Vogel increases the spectral sensitivity of photographic emulsions by adding dyes

1874

Léon Vidal combines chromolithography with Woodburytype printing

1875

Émile Reynaud invents the Praxinoscope

1877

Eadweard Muybridge experiments with multiple cameras to take successive photographs of horses in motion

1878

The Dry-plate photographic process was invented.



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1878

First attempt at motion pictures by Muybridge who used 12 cameras, each taking 1 picture. This experiment was to see if all 4 of a horse's hooves leave the ground.

1878

George Eastman begins to simplify the complicated wet plate process

1878

Karl Klic invented the most precise and commercially successful method of photogravure printing

1879

George Eastman invents an emulsion-coating machine which enables the mass-production of photographic dry plates

1879

Dennis Redmond develops the electric telescope to produce moving images

1880

George Eastman begins to commercially manufacture dry plates

1880

Muybridge demonstrates to an audience at the San Francisco Art Association Rooms his Zoopraxiscope, a Zoetrope adapted to project photographic images in motion

1881

Eastman Dry Plate Company is founded

1881

First book about television, The Electric Telescope, is published

1882

George Eastman and William Walker devise a roll film holder, a flexible film layered with gelatin emulsions on paper backing (which is stripped away after development) and a machine to produce the film

1882

French physiologist Étienne-Jules Marey invents the chronophotographic gun, a camera shaped like a rifle that records twelve successive photographs per second.



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1884

The first known photograph of a tornado is made near Howard in the US.

1884

The Stebbing Automatic Camera is the first production camera to use roll film.

1885

Eastman makes coated photo printing paper.

1885

The earliest photograph of a meteor shower is made.

1885

Eastman American Film is introduced as the first transparent film negative

2 May 1887

Hanibal W Goodwin applied for a patent for a transparent roll-film made of nitro-cellulose and camphor. However, Goodwin's claim was not specific enough for the patent examiners and he was not granted a patent until September 1898 after several revisions and delays.

1887

Celluloid film introduced and eventually replaced glass plate photography.

1887

Thomas Alva Edison commissions W. K. L. Dickson to invent a motion picture camera

1888

Eastman Kodak forms.

1888

The first motion picture films are made on sensitized paper rolls taken with a camera by Louis Aime Augustin Le Prince

1888

The name Kodak is born and the Kodak Camera is placed on the market and is loaded with 100 exposures on a film roll for \$25



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10 Dec 1889

The Eastman Company was granted a patent for a nitro-cellulose roll-film which included a non-curling layer of hardened gelatin on the back of the celluloid. They were eventually sued successfully for patent infringement by the owners of The Goodwin Film & Camera Company and settled for five million dollars.

1889

Kodak #2 is introduced

1889

The first commercial transparent roll film is put on the market by the Eastman Company.

1889

The development of motion-picture roll film

1890

Charles Driffield and Ferdinand Hurter publish their work on emulsion sensitivity and exposure measurement

1890

Nadar, a famous Parisian photographer makes several studio portraits of George Eastman.

1891

The telephoto lens is first used with cameras.

1891

W. K. L. Dickson and Thomas A. Edison patent the 'peep-show' Kinetoscope, a type of viewing device in which a film loop ran on spools between an incandescent lamp and a shutter for individual viewing

1892

Frederick Ives develops first complete system for natural color photography

1893

Fred Ott sneezing in 'Edison Kinetoscopic Record of a Sneeze January 7 1894', was filmed at the 'Black Maria', a motion picture studio that rotates on tracks to follow the light of the sun built by Edison



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1893

Dickson's camera is patented as the Kinetograph which was a device that ensured the intermittent but regular motion of the perforated celluloid film strip to ensure precise synchronization between the film and the shutter.

1894

Louis and Auguste Lumière invent the Cinématographe in Lyon, a combination camera-projector that can project moving images onto a screen.

1894

Edison opens the first Kinetoscope parlor in New York City.

1894

Photo Club of Paris is established.

1894

Robert Barker opens the first Panorama, prototype of future movie houses

8 Nov 1895

German physicist Wilhelm Conrad Roentgen discovers x-rays and the world immediately appreciates their medical potential.

1895

France's Lumiere brothers build a portable movie camera and show a film of an oncoming train for a paying Paris audience.

1895

The Pocket KODAK Camera is announced

1895

The birth of cinema: In Berlin, Max and Emil Skladanowsky show a 15-minute public program of films made using their Bioscop

1895

First advertised public screening of films at LeGrand Café, Paris including the Lumière brothers' 'Arrival of a Train at a Station', one of the many actuality films or documentary views they made is screened



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1896

Public demonstration in New York City of the Edison Vitascope designed by Thomas Armat, bringing projection to the United States

1896

Britain's first projector, the Theatrograph (later the Animatograph) is demonstrated by Robert W. Paul

1896

Josef Maria Eder and Eduard Valenta publish stereoscopic Röntgen photographs.

1896

British photographers George Albert Smith and James Williamson construct their own motion picture cameras and begin production of trick films

1897

125 people, most of them from the upper classes, die during a film screening at the Charity Bazaar in Paris after a curtain is ignited by the ether used to fuel the projector lamp

Sep 1898

Hanibal W Goodwin was granted a patent for a transparent roll-film made of nitro-cellulose and camphor.

1898

Photographs are first taken by artificial light.

1899

Dickson's kinetophone synchronizes the kinetograph and the phonograph (1891-1899)

1899

Founding of Pathé-Frères, the world's largest film producer and distributor through WW I

1899

Pascal develops the first photographic roll film spring wind motor advance.

1900

First mass-marketed camera, the Kodak Brownie, costs \$1.



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1902

Germany's Zeiss invents the four-element Tessar camera lens.

1904

Hine photographs America's underclass.

1906

George Albert Smith and Charles Urban develop first commercially successful photographic colour process called 'Kinemacolor'.

1906

Panchromatic plates are marketed by Wratten and Wainright in England.

1907

Lumière Brother's autochrome colour process is marketed.

1908

Gabriel Lippmann wins a Nobel Prize for his method of reproducing colour by photography.

1910

Sweden's Elkstrom invents 'flying spot' camera light beam.

1912

The Pocket Camera is introduced.

1913

Eastman Kodak Company establishes first industrial photographic research laboratory.

1914

In Germany, the 35mm still camera is introduced by Leica.

1914

First 35mm still cameras are developed.

1915

Pluto photographed for the first time (although unknown at the time)



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1916

Cameras are developed with optical rangefinders.

1916

3A Autographic with coupled Rangefinder is introduced.

1916

Alvin Langdon Coburn's Vortographs: deliberate abstractions.

1916

Paul Strand's photographs emphasize abstract and objective qualities.

1920

American artist Man Ray creates the Rayogram, a collage of objects placed onto photographic paper and exposed to light.

1920

American photographer James Van Der Zee creates memorable portraits of African-Americans.

1920

Edward Steichen becomes chief photographer for the fashion magazines 'Vogue' and 'Vanity Fair'.

1922

The first microfilm device introduced.

1924

The first photo facsimile transmitted across Atlantic by radio.

1924

Ernst Leitz designs and then markets the 35mm Leica cameras.

1925

László Moholy-Nagy's 'Painting Photography Film'. Experiments with photograms.

1927

General Electric invents the modern flashbulb.



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1928

The first fully automatic photographic film developing machine patented

1929

The 'Film and Foto' exhibition that synthesized modernism in photography is held in Stuttgart.

c. 1930

(Between 1930-1940) Nickolas Muray's photographs from the 1930s.

1930

Gaspar bleached-colour process is announced.

1931

The first infra-red photograph, Rochester, NY

14 Mar 1932

George Eastman dies in Rochester, New York.

1932

Ansel Adams founds Group f.64 dedicated to straight photography. Group f.64 photographers use large cameras and small apertures to record nature's light.

1932

First light meter with photoelectric cell, invented by Bernard-Ferdinand Lyot, is introduced.

1933

The first known photo of Loch Ness monster (or whatever) is taken

1934

Retina I introduced using standard 35mm case.

1935

Eastman Kodak markets Kodachrome film.

1936

The first photo finish camera installed at Hialeah Race track in Hialeah FL



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1936

American combat photographer, Robert Capa captures on film the Spanish Civil War, notably 'Death of a Loyalist Soldier'.

1936

American photographer Margaret Bourke-White takes the cover photo for first issue Life magazine.

1936

Life magazine begins.

1938

The first Xerox copy made

1938

American photographer Walker Evans has his first showing at the Museum of Modern Art, the basis for his book 'American Photographs'.

1938

Super Kodak Six 20-Autoexposure is developed.

1939

'Farmer and Wife' by Arthur Rothstein from portfolio of FSA Photographs.

1940

AnSCO, Agfa, and Sakura Natural colour films are introduced.

1945

'V-J Day in Times Square' by Alfred Eisenstaedt (sailor kissing a nurse).

1946

Eastman Kodak introduces KODAK Ektachrome, the company's first colour film that can be processed by the photographer.

1947

The first instant developing camera demonstrated in NYC, by E H Land



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1947

Dennis Gabor describes the principles of holography.

1948

Edwin Land markets the Polaroid camera.

1948

First 35mm Nikon camera is introduced.

1948

Hasselblad 1600F introduced.

1949

The first magazine on microfilm offered to subscribers (Newsweek)

1949

The first Polaroid camera sold \$89.95 (NYC)

c. 1950

(Between 1950-1959) American photographers Irving Penn and Richard Avedon become known for their work in advertising and fashion photography.

1951

Still camera get built-in flash units

1951

Aaron Siskind's photograph 'New York 2', demonstrates a trend toward abstraction.

1951

W. Eugene Smith's photo essay, 'Spanish Village'.

1955

Edward Steichen organizes 'The Family of Man', one of the most popular exhibitions of photographs ever presented.

1956

The Leica M3 introduced.



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1959

Bob Noyce of Fairchild Semiconductor, U.S., prints an entire electronic circuit on a single crystal or microchip of silicon using a photographic process. This breakthrough enables the computer revolution to begin.

1959

Nikon F is introduced.

1960

EG&G develops an extreme depth underwater camera for U.S. Navy.

1960

First successful hologram is produced.

1961

Eastman Kodak introduces faster Kodachrome II color film.

1963

126 Cartridge / Instamatic Cameras are introduced.

1963

Polaroid introduces instant colour film.

1968

Photograph of Earth from the moon.

1968

'Robert Kennedy Moments After He Was Shot' by Bill Eppridge.

1968

'Vietnam Execution' by Eddie Adams (Viet Cong officer killed).

1969

Astronauts send first live photographs from the moon.

c. 1970

(Between 1970-1979) German-born British photographer Bill Brandt and American photographer Jerry Uelsmann practice the movement toward the fantastic in photography through manipulation.



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1970

American photographer, Eliot Porter publishes the collection of wildlife photos, 'Appalachian Wilderness'.

1972

Polaroid camera can focus by itself

1972

British researcher Godfrey Hounsfield develops a computerized axiomatic tomography CAT scanner to cross sectionally x-ray the brain.

1972

Pocket Instamatic Camera-110 is introduced.

1972

Polaroid introduces one-step instant photography with the SX-70 camera.

1972

'Terror of War: children on Route 1 near Trang Bang' by Huynh Cong (Nick) Ut.

1973

Fairchild Semiconductor releases the first large image forming CCD chip with 100 rows and 100 columns.

1976

American photographer Richard Avedon publishes the collection 'Portraits'.

1976

Canon AE-1 first 35mm camera with built in microprocessor is introduced.

1977

American photographer Cindy Sherman creates the photographic series 'Untitled Film Stills'.

1978

The first point-and-shoot camera from Konica



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1978

Konica introduces first point-and-shoot, auto-focus camera.

1984

Canon demonstrates first electronic (digital) still camera.

1984

Japanese newspapers cover the opening of the Olympics in Los Angeles with Canon RC-701 Still Video Cameras and analogue transmitter.

1985

Minolta Maxxum 7000 auto-focus, 35mm SLR.

1986

Minolta introduces first professional auto focus camera, the Maxxum 9000.

1987

Both Kodak and Fuji introduce novel disposable cameras, such as the Kodak Fling.

1987

Canon produces RC-760 Still Video Camera with a 600,000 pixel CCD.

1987

Eastman Kodak announces the 1.4 megapixel CCD for digital cameras.

1987

'USA Today' begins to cover special events with the Canon RC-760 camera.

1988

Eastman Kodak announces a 4 megapixel CCD.

1988

PhotoMac is the first image manipulation program available for the Macintosh computer.

1988

Sony and Fuji announce new digital cameras.



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1989

'After The Massacre In Beijing One Man Faces Down The Army' by Stuart Franklin.

1989

Following the dismantling of the Soviet bloc, film companies are privatised and western films are welcomed in eastern Europe.

1989

Letraset releases Color Studio 1.0 (TM), the first professional image manipulation program for Macintosh computers.

1989

Sony announces MCV-5000 twin ship camera with two separate CCD elements for luminance and chrominance.

1990

Hubble Space Telescope sends its first photograph's from space.

1990

Adobe Photoshop 1.0 (TM) is the second professional image manipulation program available for Macintosh computers.

1990

Dycam releases an electronic camera for business imaging applications.

1990

Eastman Kodak prototypes an electronic camera back designed for the needs of photojournalists.

1990

Kodak announces the development of its Photo CD system.

1991

Electronic imaging plays an important role in coverage of the Gulf War. Although most still-image photojournalists on the scene use conventional cameras and film for shooting, electronic techniques are widely employed to transmit the pictures home.



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1991

Rollei and Arca Swiss announce their digital studio cameras.

1991

Sony releases the SEPS-1000 Digital Studio Camera for modest quality advertising.

1991

The Kodak Professional Digital Camera System is introduced.

1992

Leaf Systems announces the Leaf camera back for studio cameras, such as Hasselblad or Sinar.

1993

Adobe Photoshop is available for MS-DOS/Windows platforms.

1993

LivePicture image manipulation software is announced by HSC, Inc.

1993

Nikon, Canon, Leaf Systems, and others announce new digital cameras for photojournalists and studio photographers respectively.

1994

Apple Computer introduces RISC technology to the desktop computer market with the new PowerPC line.

1994

Apple Computer, Sony, and Kodak announce new digital cameras.

1994

Associated Press announces the AP/Kodak NC2000 digital camera for photojournalists.

1996

Advanced Photo System (APS) is introduced using a 24-mm film format, features of the system include: leaderless cassette, easy loading and unloading, smaller cameras and three print formats interchangeable on the same roll of film.



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1996

Advantix Camera is introduced.