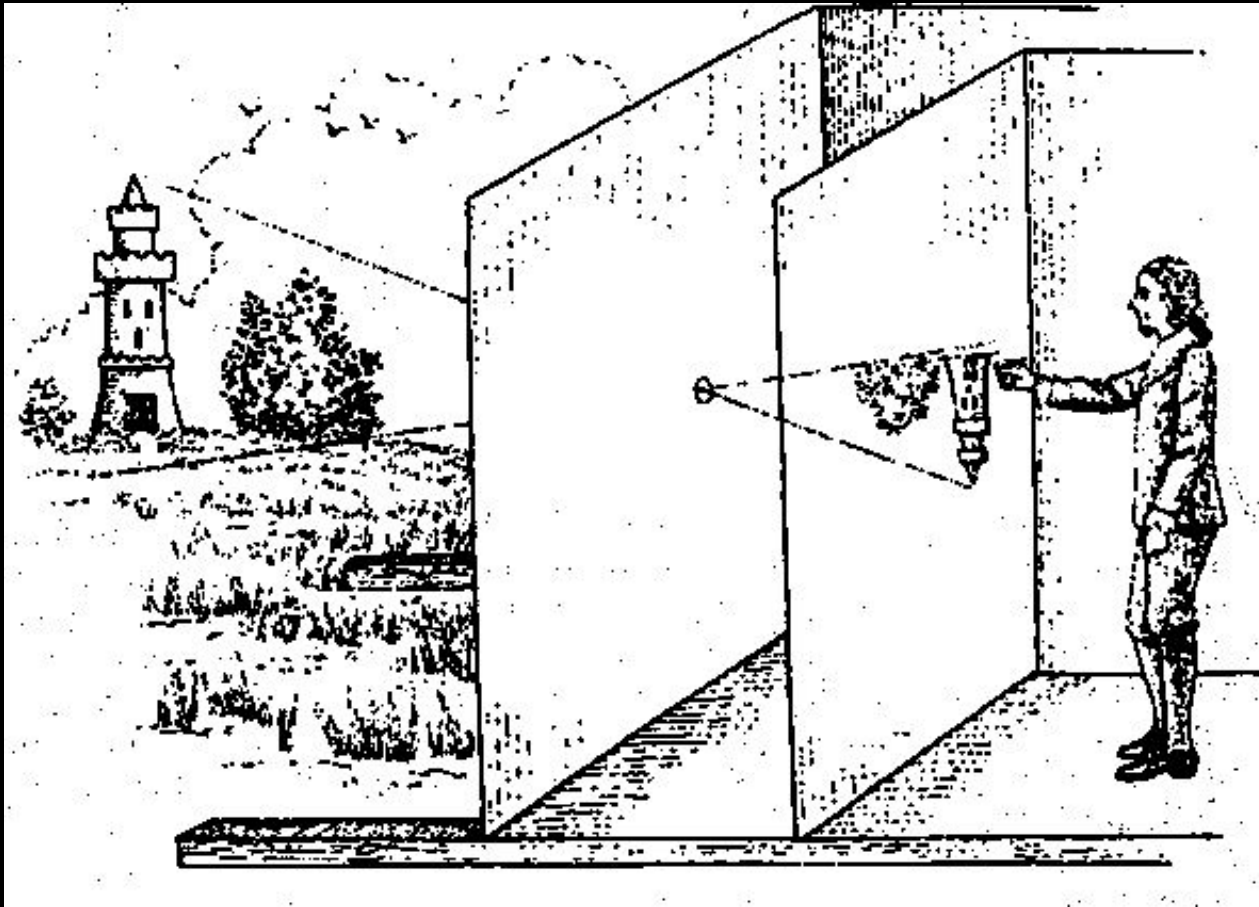


History
of
Photography

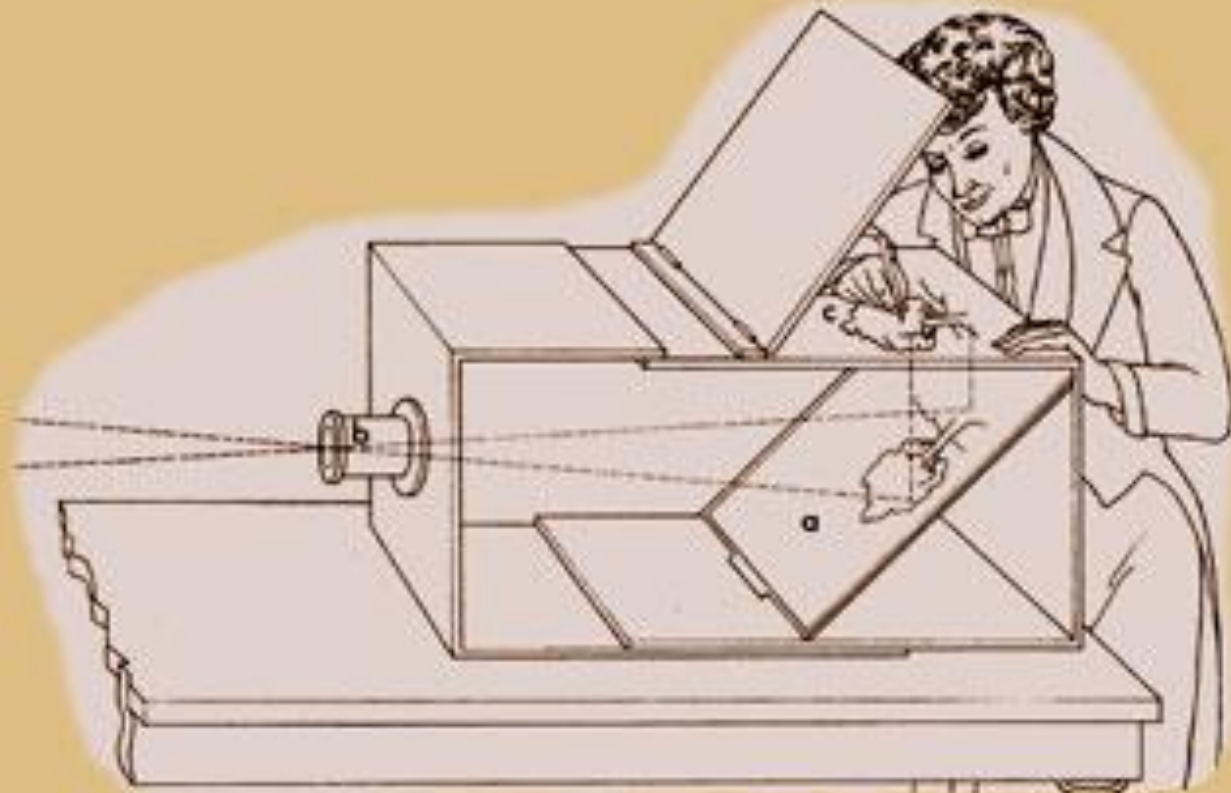
ancient times: Camera obscuras used to form images on walls in darkened rooms; image formation via a pinhole



16th century: Brightness and clarity of camera obscuras improved by enlarging the hole inserting a telescope lens



17th century: Camera obscuras in frequent use by artists and made portable.



A typical camera obscura at the beginning of the 19th Century, somewhat larger than the replica shown above, incorporating a mirror (a), which reflects the image from the lens (b) onto a glass plate (c) which holds a sheet of paper on which the image is being traced. The double interlocking box enables precise focusing.

After Brian Coe, *Cameras: From Daguerrotypes to Instant Pictures* (Gothenberg, Sweden: Nordbok, New York: Crown Press, 1978), p. 2.

1727: Professor J. Schulze mixes chalk, nitric acid, and silver in a flask; notices darkening on side of flask exposed to sunlight. Accidental creation of the first photo-sensitive compound.



1800: Thomas Wedgwood makes "sun pictures" by placing opaque objects on leather treated with silver nitrate; resulting images deteriorated rapidly, however, if displayed under light stronger than from candles.



1816: Nicéphore
Niépce combines the
camera obscura with
photosensitive paper





1826: Niépce creates a permanent image

View from Niepce's Window at Le Gras.



1834: Henry Fox Talbot creates permanent (negative) images using paper soaked in silver chloride and fixed with a salt solution. Talbot created positive images by contact printing onto another sheet of paper.

1837: Louis Daguerre creates images on silver-plated copper, coated with silver iodide and "developed" with warmed mercury; Daguerre is awarded a state pension by the French government in exchange for publication of methods and the rights by other French citizens to use the Daguerreotype process.





1841: Talbot patents his process under the name "calotype".

Known also as "Tintypes"



1846

World Bank set to aid Iraq

Video piracy thrives in China

Unauthorized copying of movies and TV shows is rampant in China, with the market for pirated goods estimated at \$1.5 billion.



Nation
journal.com/nation_world



In 1953
Scientists James D. Watson and Francis H.C. Crick discovered the double-helix structure of DNA, the molecule that contains the human genes.

A3
MONDAY
FEBRUARY 28, 2005

Arrest of BTK suspect shocks church

Members know him as kind, giving man

By Rosana Hegeman
Associated Press

WICHITA, Kan. — They worshipped next to Dennis L. Rader for years, sharing the same pews and singing from the same hymnals. They knew him as a Cub Scout leader, a respected church official, a kind friend.

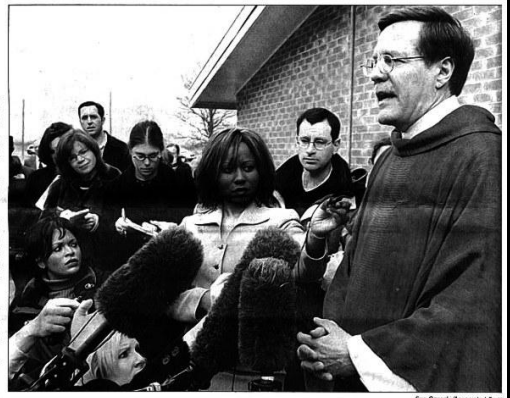
Now, members of Christ Lutheran Church must confront the possibility that 59-year-old Rader is something else: The BTK serial killer, blamed for 10 deaths in the Wichita area from 1974 to 1991.



Dennis L. Rader has been linked to 10 Kansas deaths from 1974 to 1991.

"We feel dismay, anger, devastation, utter shock and disbelief. The very foundation of our faith is shaken," said Gerald Mansholt, bishop of the Central States Synod of the Episcopal National Church.

Rader, a church member for 30 years, an usher and president of the church council, was arrested Friday in suburban Park City, where he worked as a city codes enforcement supervisor. He remained jailed yesterday pending his first court appearance. Just days before his arrest, Rader brought spaghetti sauce and salad for a church supper, even though he was unable to attend himself, church member Paul Carlstedt recalled. Carole Nelson called Rader "a very



"We feel dismay, anger, devastation, utter shock and disbelief," said Gerald Mansholt, bishop of the Central States Synod of the Episcopal National Church. BTK suspect Rader has been a member of Christ Lutheran Church for 30 years.

kind man," recounting his concern over her recent kidney operation. Bob Smyser, a fellow usher at Christ Lutheran, said his 5-year-old son recognized Rader's photo when it was flashed on the television screen at home. The boy looked up at his father and asked, "Daddy, he tricked us — didn't he?" "I am not sure what to tell him,"

Smyser said. "I am not sure what to tell myself." "The guy that walked in here was not the face of evil," he added. Investigators searched the church property Friday, but the church's pastor, Michael Clark, declined to say what they were looking for. A crisis intervention team was called to talk yesterday afternoon

with church members. The congregation had prayed for the capture of the BTK killer — a self-coined nickname that stands for "Bind, Torture, Kill" — and the end of the nightmare that has gripped this city for decades. "We prayed that it would come to a conclusion — (this is) not the conclusion we thought," Carlstedt said.

Associated Press

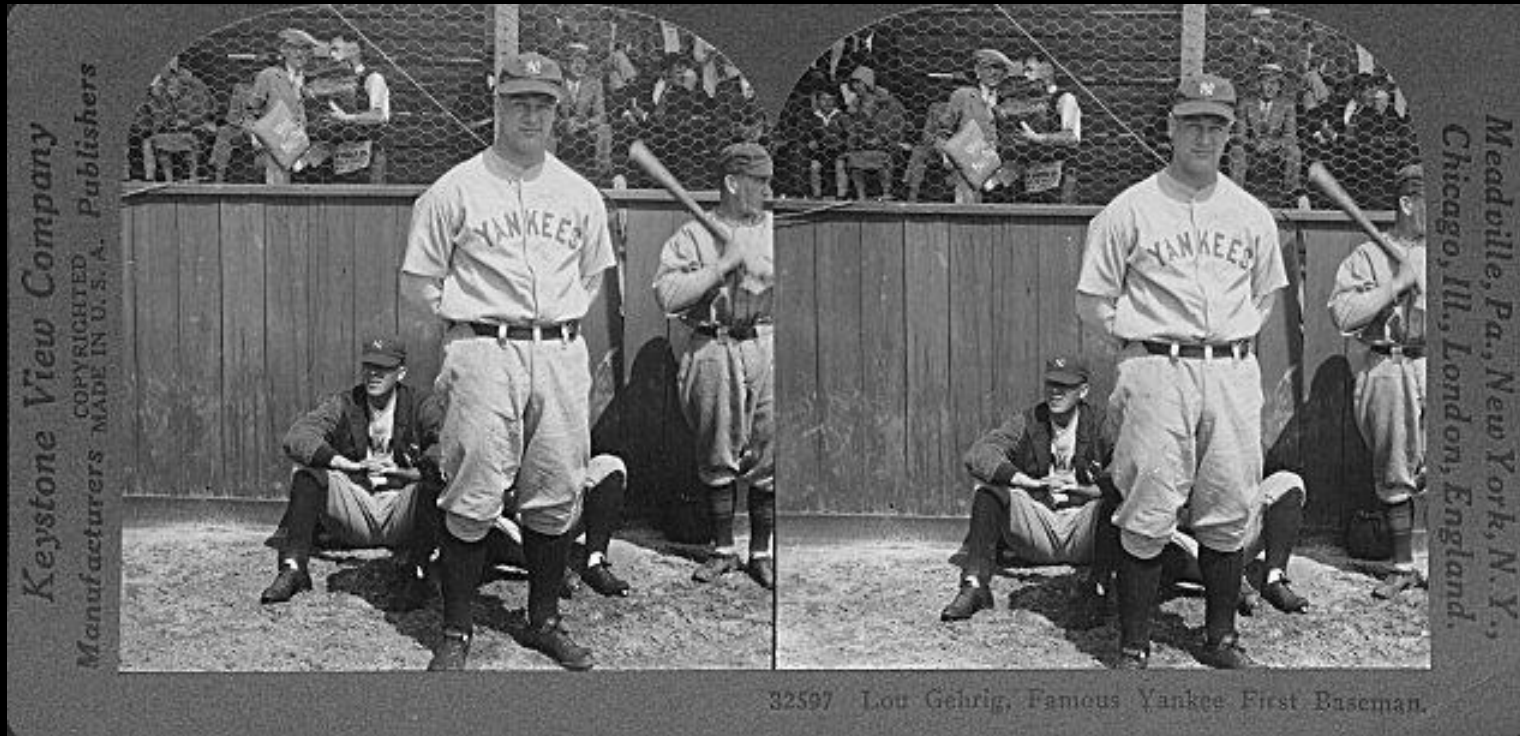
1851: Frederick Scott Archer, a sculptor in London, improves photographic resolution by spreading a mixture of collodion (nitrated cotton dissolved in ether and alcohol) and chemicals on sheets of glass. Wet plate collodion photography was much cheaper than daguerreotypes, the negative/positive process permitted unlimited reproductions, and the process was published but not patented.





1853: Nada (Felix Toumarchon) opens his portrait studio in Paris

1855: Beginning of stereoscopic era



1855-57: Direct positive images on glass (ambrotypes) and metal (tintypes or ferrotypes) popular in the US.



3 million tintypes produced by mid 1800s

1861: Scottish physicist James Clerk-Maxwell demonstrates a color photography system involving three black and white photographs, each taken through a red, green, or blue filter. The photos were turned into lantern slides and projected in registration with the same color filters. This is the "color separation" method.



1861-65: Mathew Brady and staff (mostly staff) covers the American Civil War, exposing 7000 negatives







1868: Ducas de Hauron publishes a book proposing a variety of methods for color photography.



1870: Center of period in which the US Congress sent photographers out to the West. The most famous images were taken by William Jackson and Tim O'Sullivan.





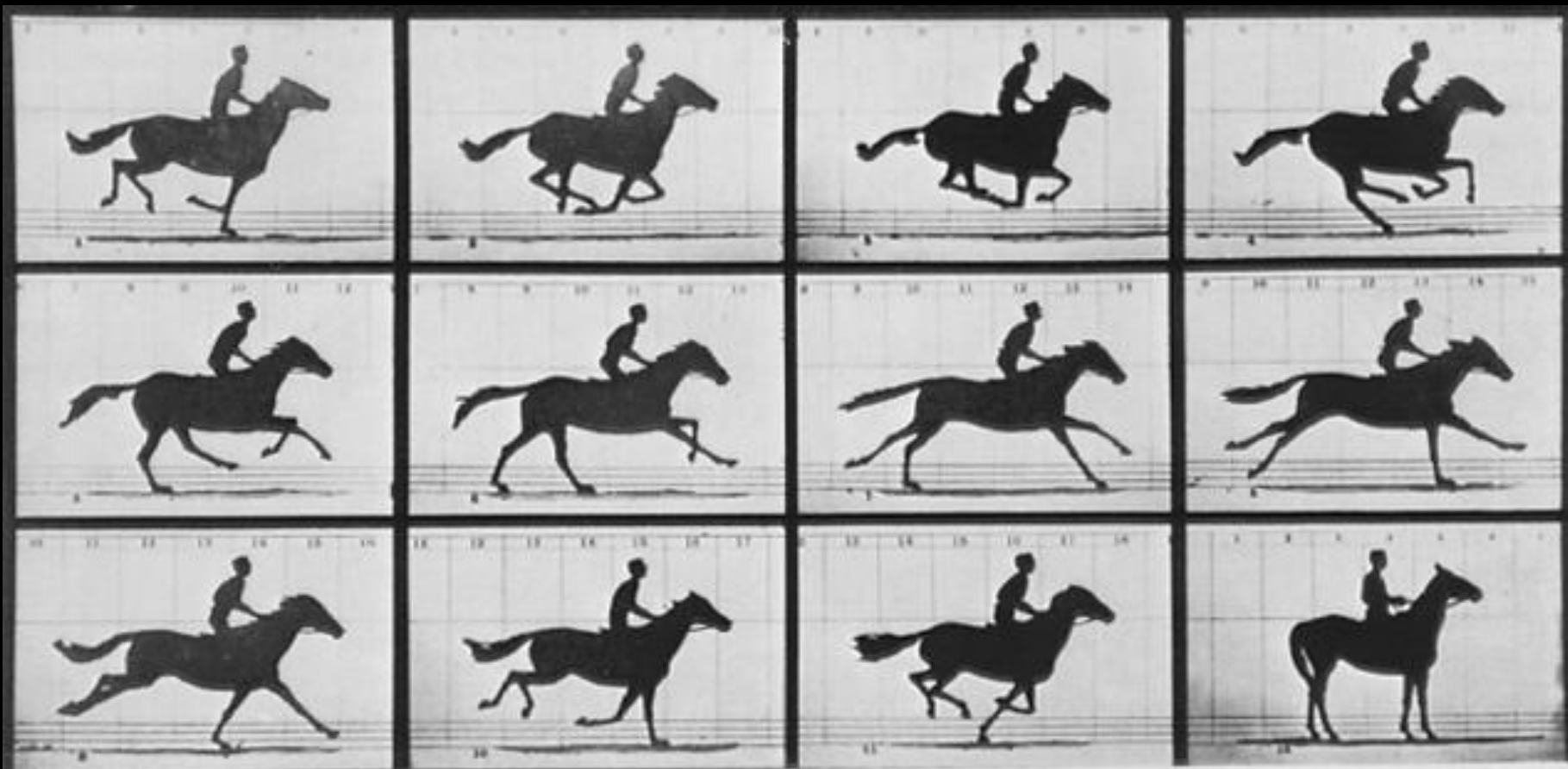
469



1871: Richard Leach Maddox, an English doctor, proposes the use of an emulsion of gelatin and silver bromide on a glass plate, the "dry plate" process.



1877: Eadweard Muybridge, born in England as Edward Muggridge, settles "do a horse's four hooves ever leave the ground at once" bet among rich San Franciscans by time-sequenced photography of Leland Stanford's horse.



Copyright, 1878, by MUYBRIDGE.

MORSE'S Gallery, 427 Montgomery St., San Francisco.

THE HORSE IN MOTION.

Illustrated by
MUYBRIDGE.

"SALLIE GARDNER," owned by LELAND STANFORD; running at a 140 gait over the Palo Alto track, 10th June, 1878.

The negatives of these photographs were made at intervals of twenty-second inches of distance, and about the twenty-fifth part of a second of time; they illustrate consecutive positions assumed in each twenty-second inch of progress during a single stride of the mare. The vertical lines were twenty-seven inches apart; the horizontal lines represent elevations of four inches each. The exposure of each negative was less than the two-thousandth part of a second.

AUTOMATIC ELECTRO-PHOTOGRAPH



1878: Dry plates being manufactured commercially.



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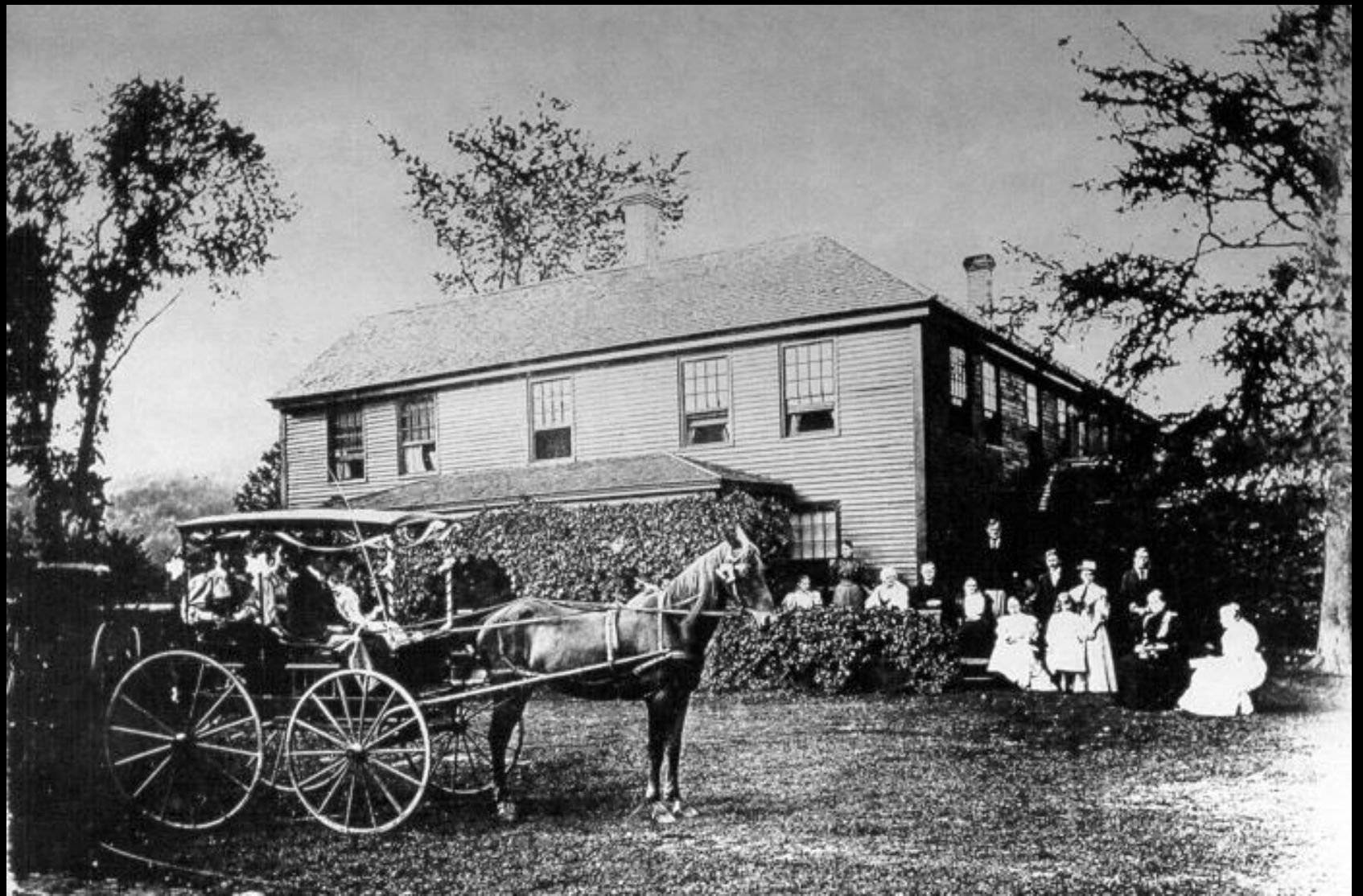
NEW YORK

BOSTON

LONDON

1880: George Eastman, age 24, sets up Eastman Dry Plate Company in Rochester, New York. First half-tone photograph appears in a daily newspaper, the *New York Graphic*.





VOLUME LIV

NUMBER FOUR

5597.
THE NATIONAL
GEOGRAPHIC
MAGAZINE

OCTOBER, 1928

CONTENTS

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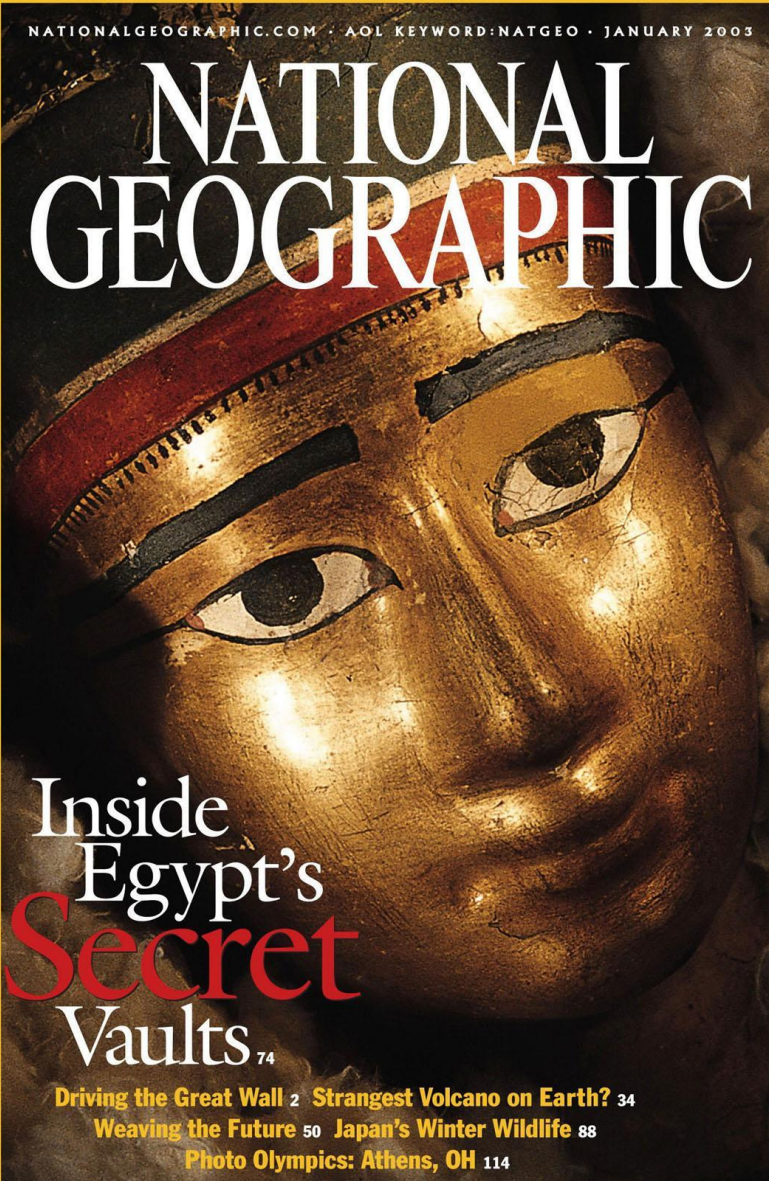
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First Issue

1888

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NATIONAL GEOGRAPHIC



Inside Egypt's **Secret** Vaults ⁷⁴

Driving the Great Wall 2 Strangest Volcano on Earth? 34

Weaving the Future 50 Japan's Winter Wildlife 88

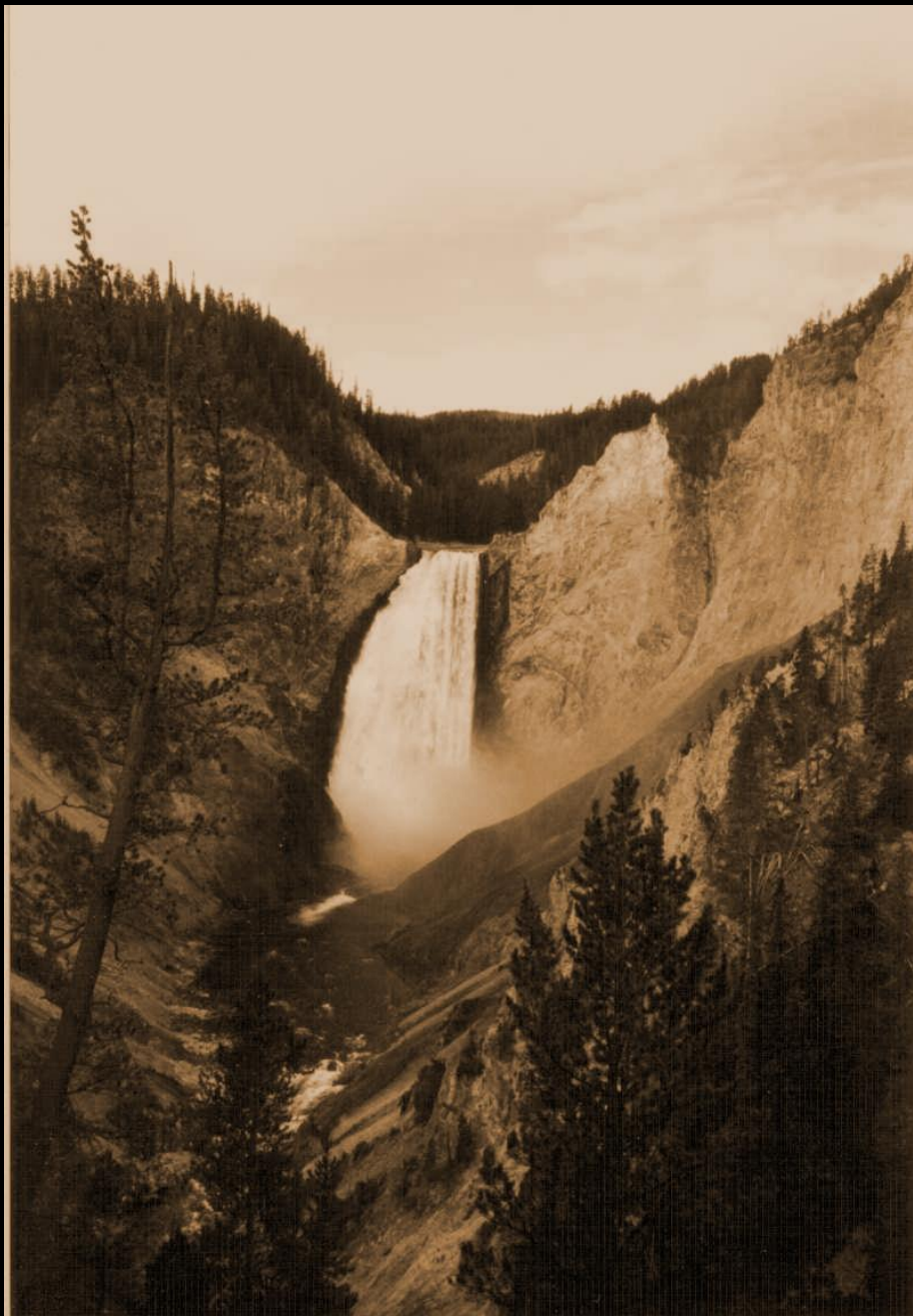
Photo Olympics: Athens, OH 114

1888: First Kodak camera, containing a 20-foot roll of paper, enough for 100 2.5-inch diameter circular pictures.

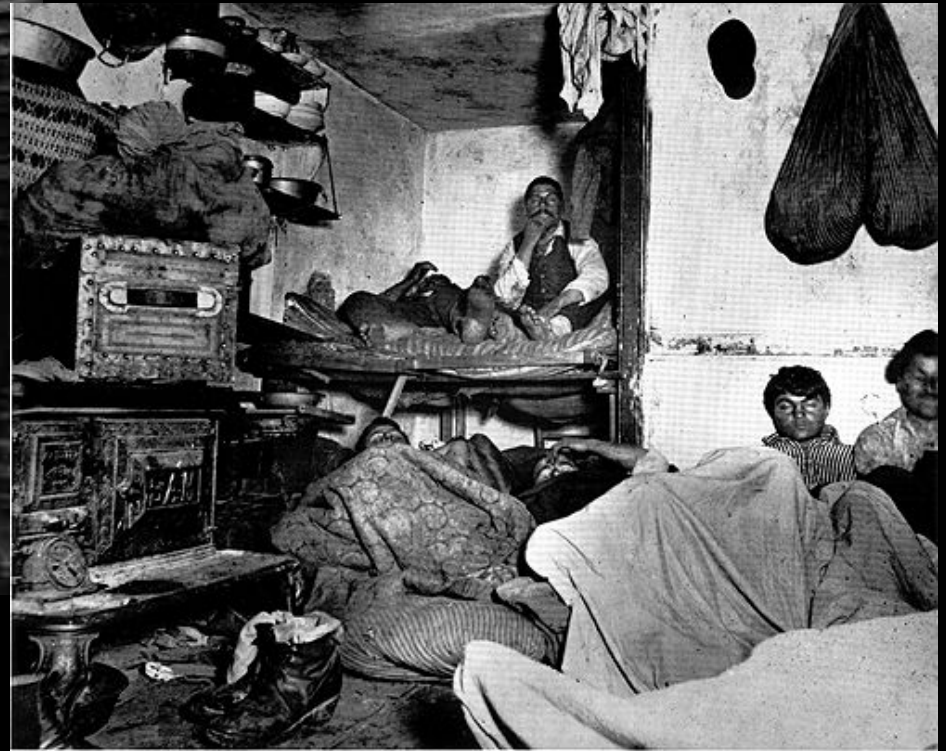
1889: Improved Kodak camera with roll of film instead of paper





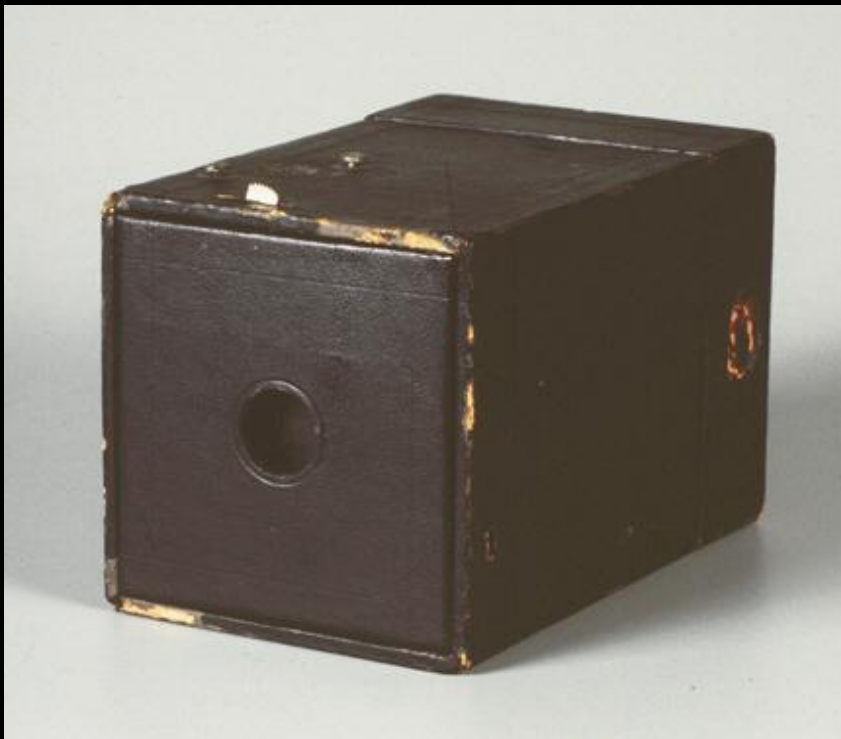


1890: Jacob Riis publishes *How the Other Half Lives*, images of tenement life in New York City

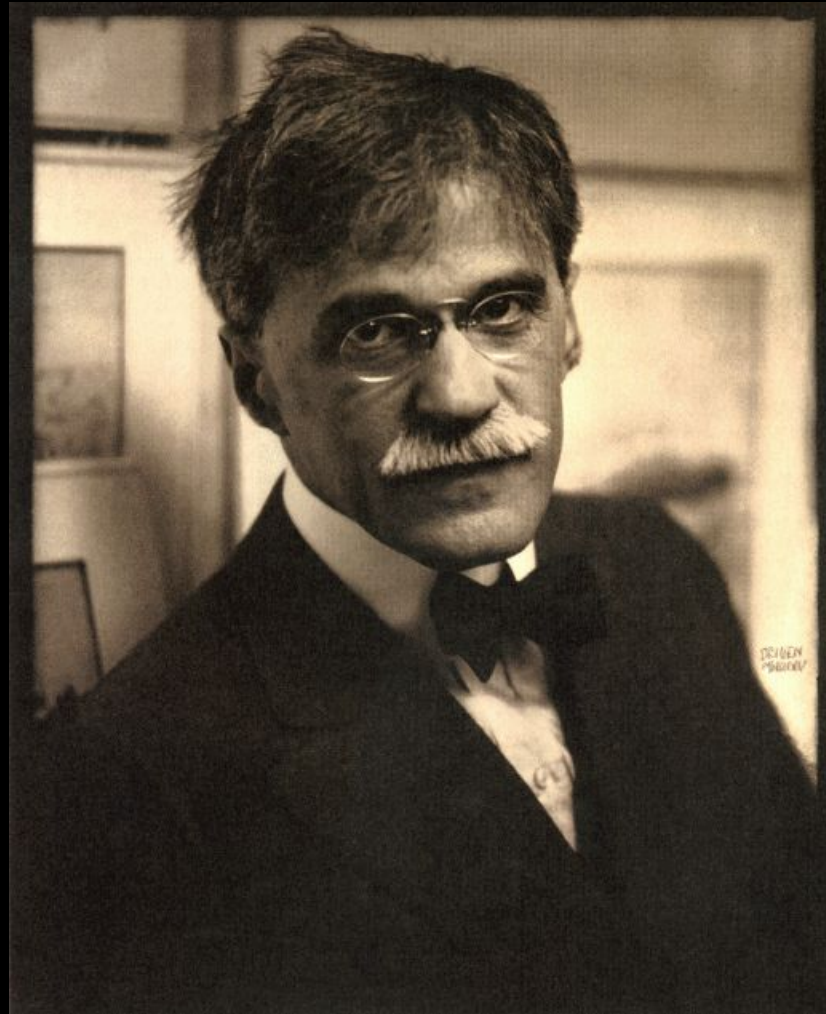


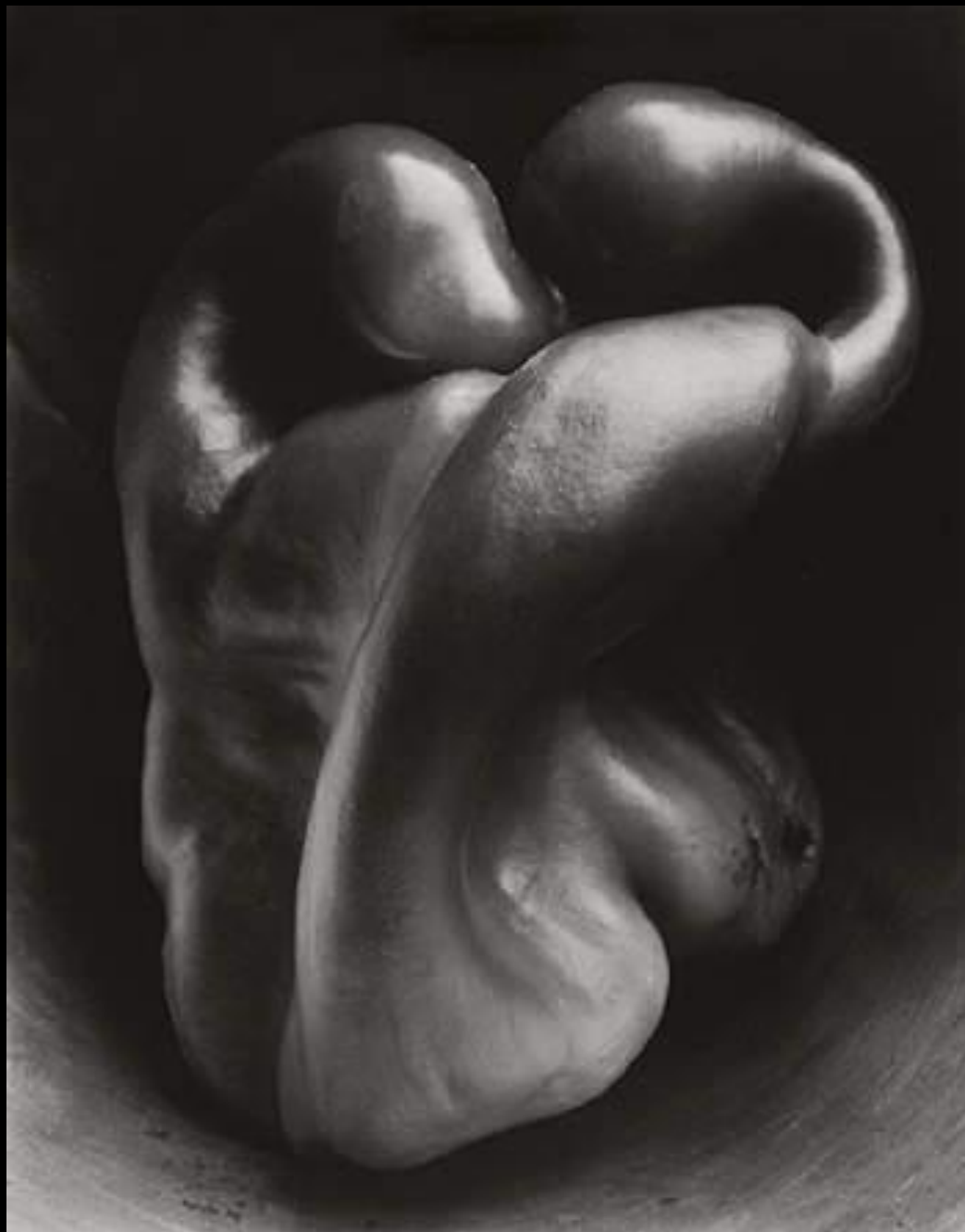


1900: Kodak Brownie box roll-film camera introduced.



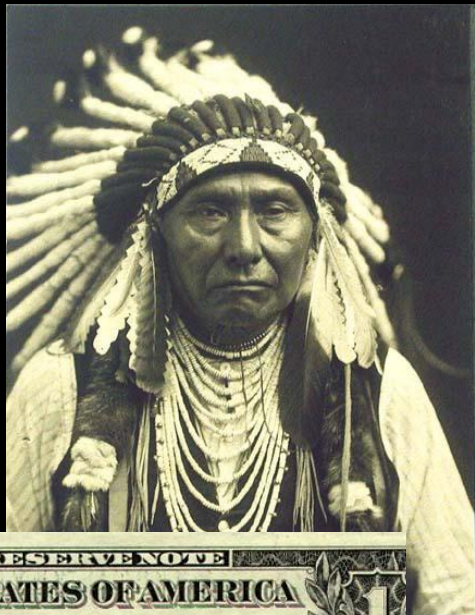
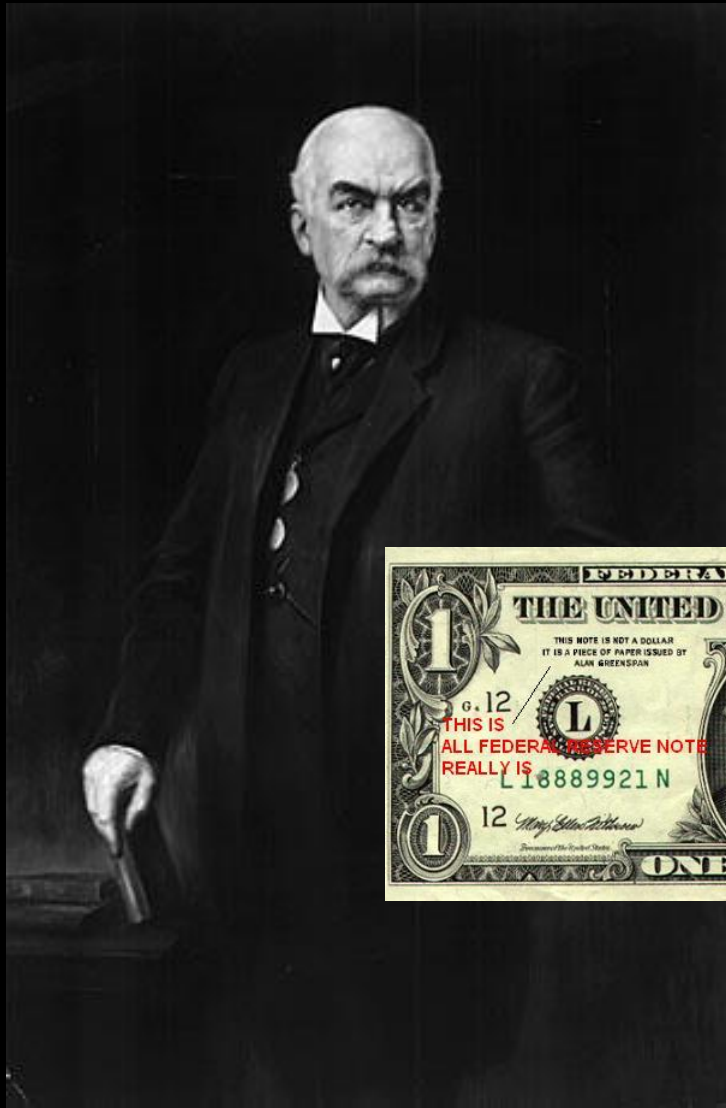
1902: Alfred Stieglitz organizes "Photo Secessionist" show in New York City





1906: Availability of panchromatic black and white film and therefore high quality color separation color photography. J.P. Morgan finances Edward Curtis to document the traditional culture of the North American Indian.





1907: First commercial color film, the Autochrome plates, manufactured by Lumiere brothers in France





1909: Lewis Hine hired by US National Child Labor Committee to photograph children working mills.





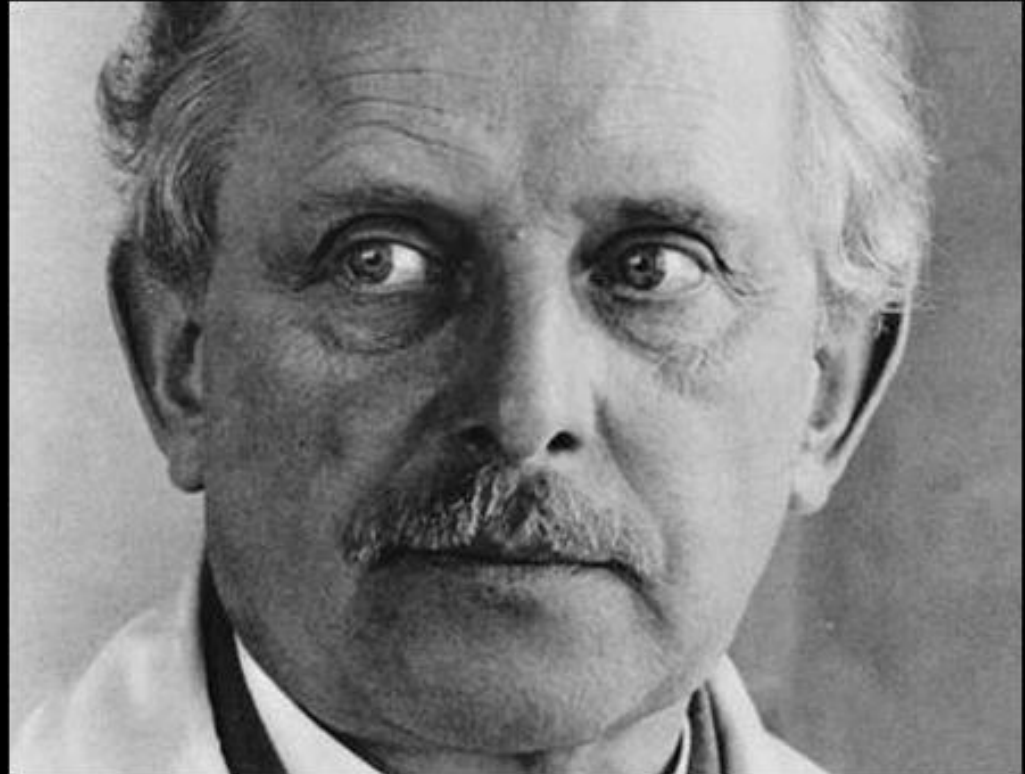




Dorothea Lange

May 25, 1895 – October 11, 1965

1914: Oscar Barnack, employed by German microscope manufacturer Leitz, develops camera using the modern 24x36mm frame and sprocketed 35mm movie film.



1917: Nippon Kogaku K.K., which will eventually become Nikon, established in Tokyo.

First Nikon camera:
The Nikon 1



1921: Man Ray begins making photograms ("rayographs") by placing objects on photographic paper and exposing the shadow cast by a distant light bulb; Eugene Atget, aged 64, assigned to photograph the brothels of Paris

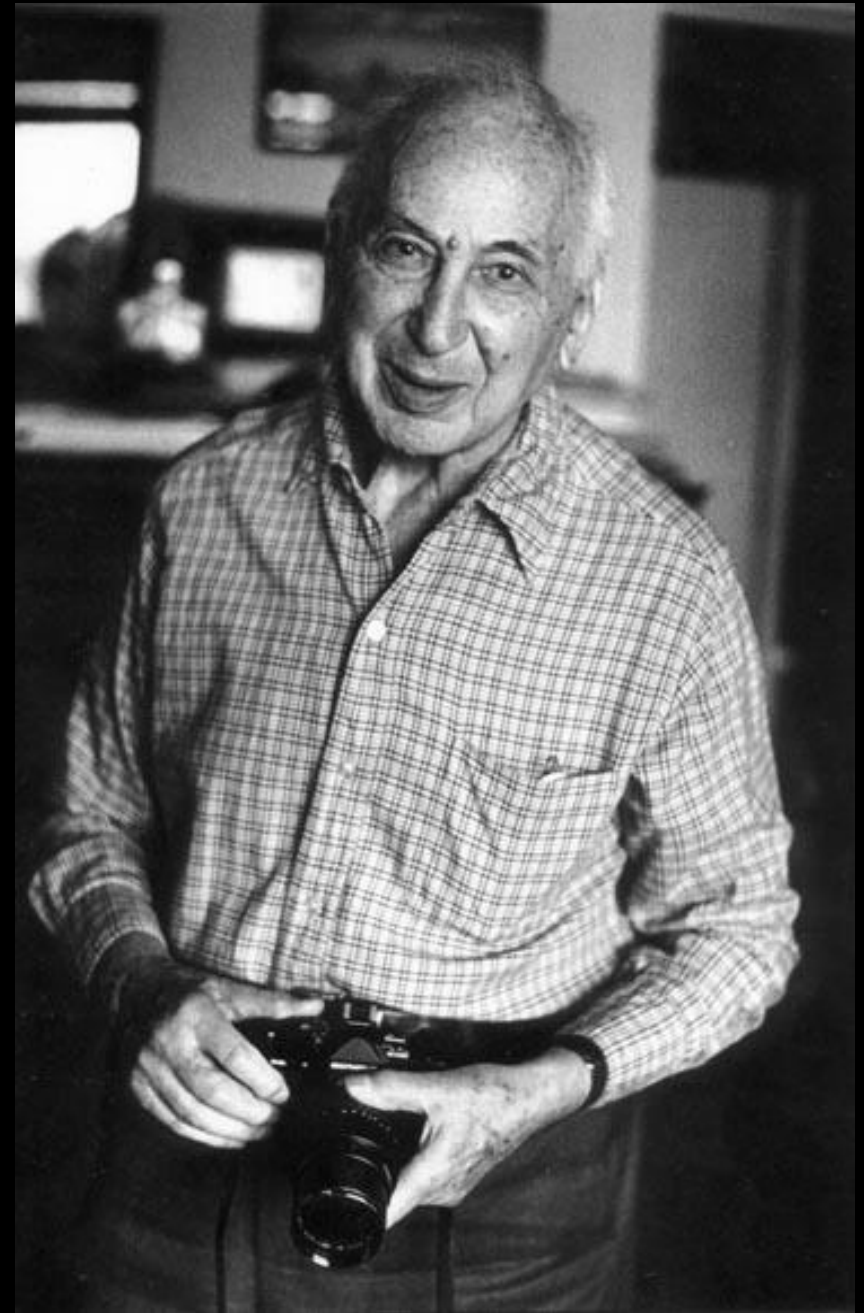




1924: Leitz markets a derivative of Barnack's camera commercially as the "Leica", the first high quality 35mm camera.



1925: André Kertész moves from his native Hungary to Paris, where he begins an 11-year project photographing street life

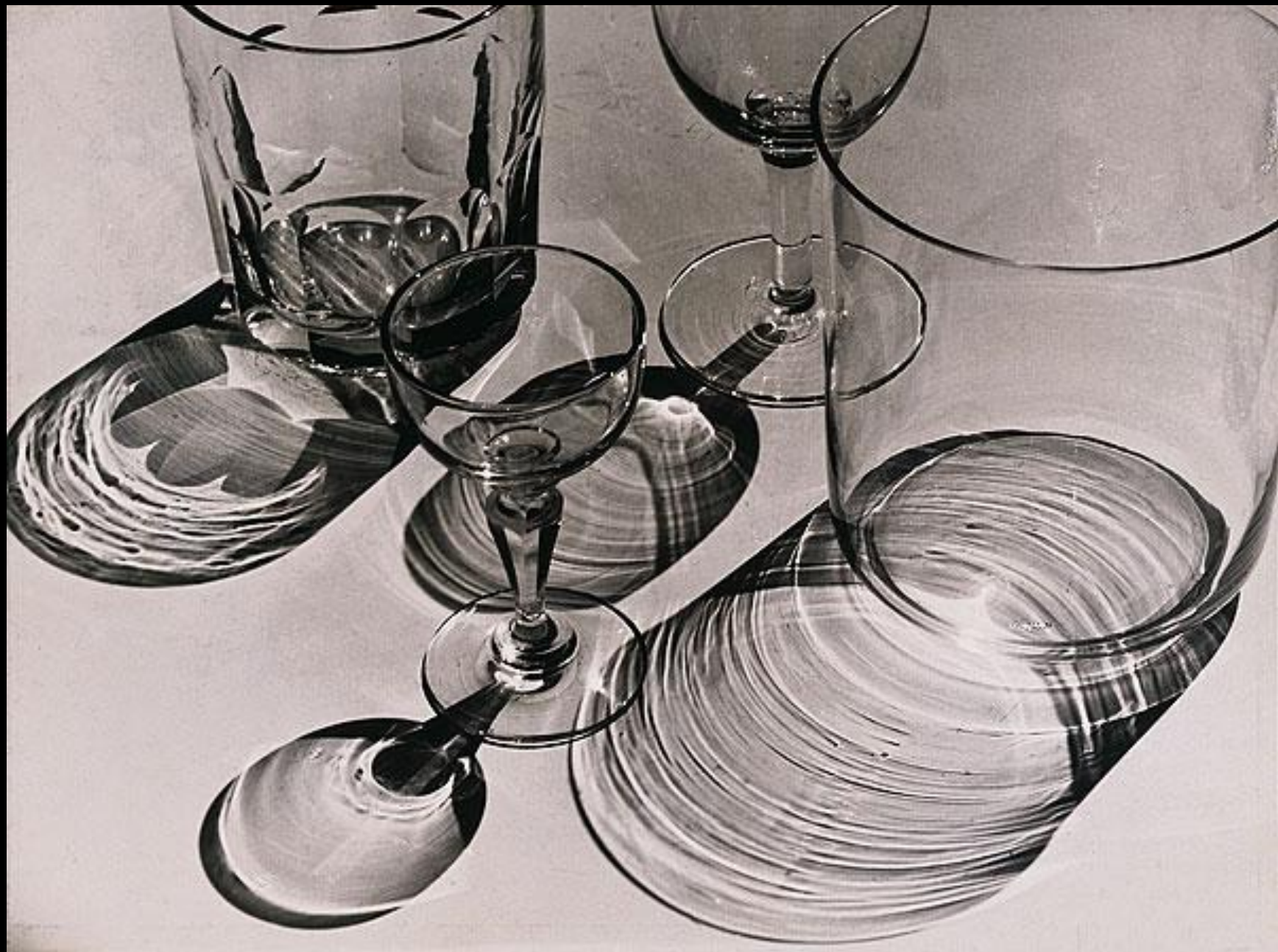




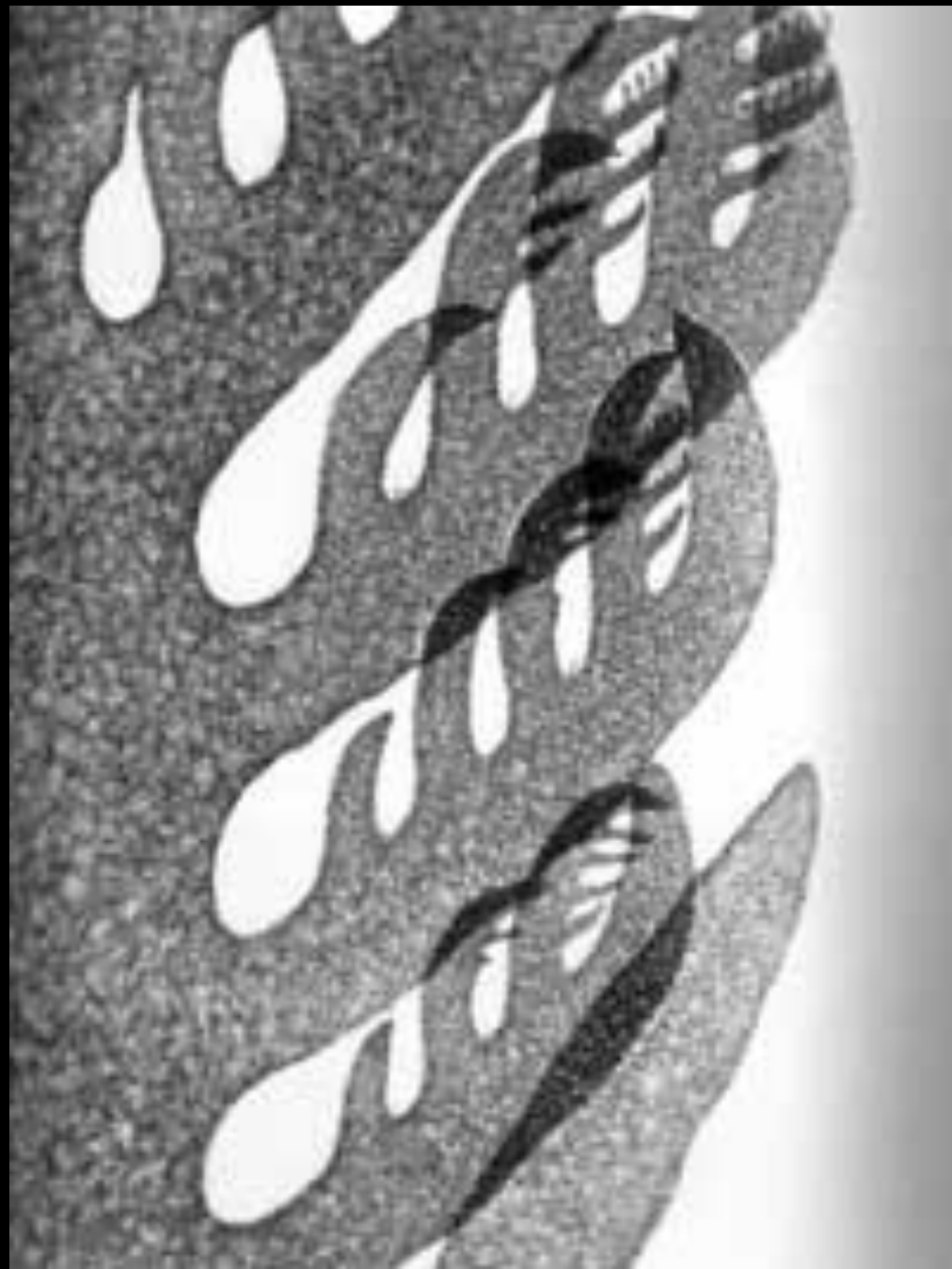
The 35mm Camera 1927

1928: Albert Renger-Patzsch publishes *The World is Beautiful*, close-ups emphasizing the form of natural and man-made objects.





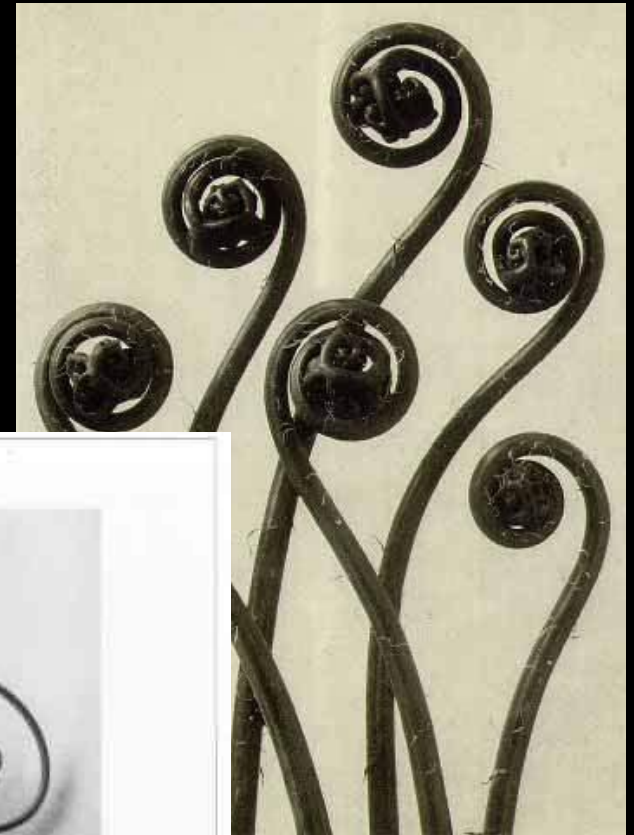




Rollei introduces the Rolleiflex twin-lens reflex producing a 6x6 cm image on rollfilm

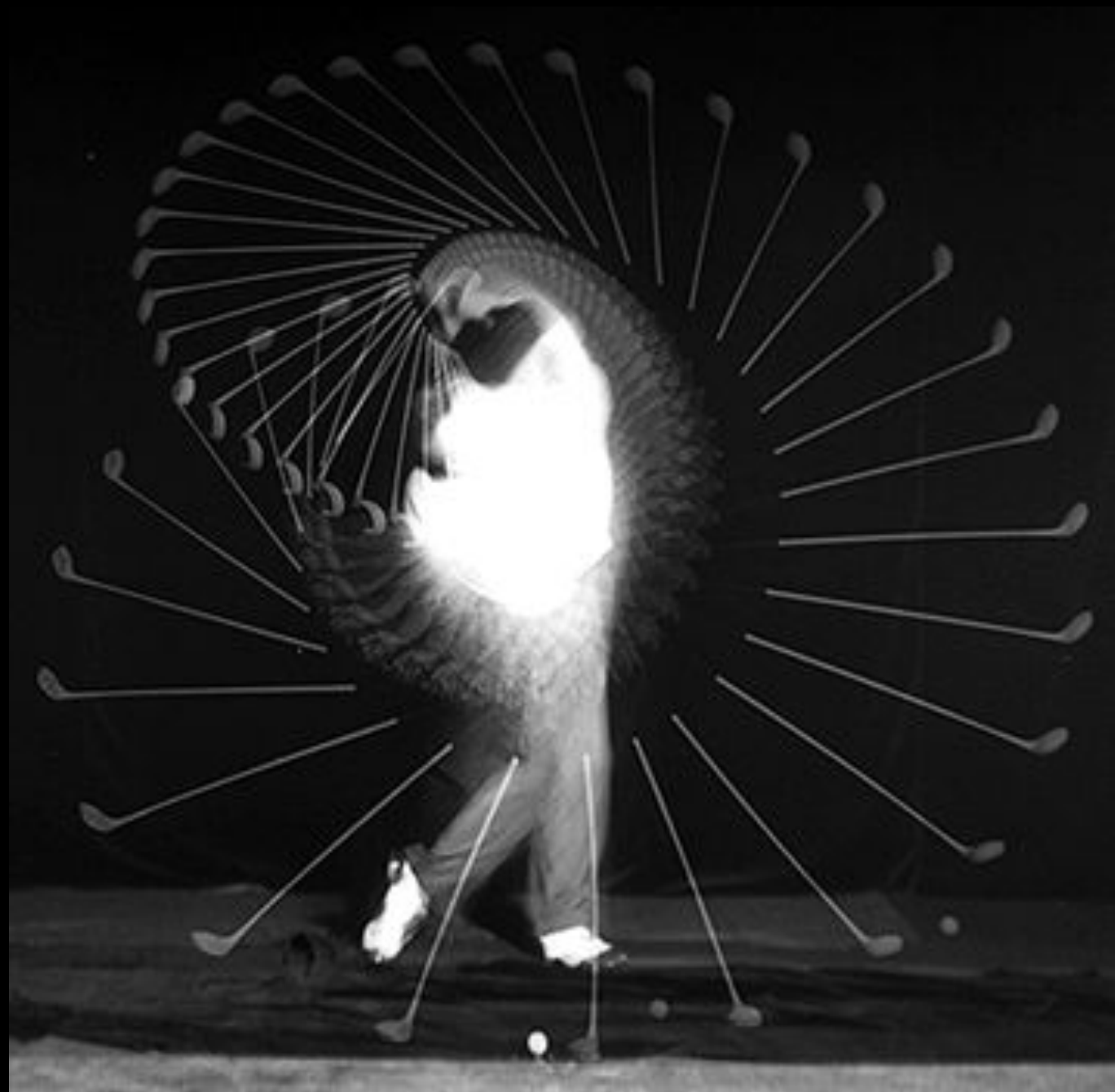


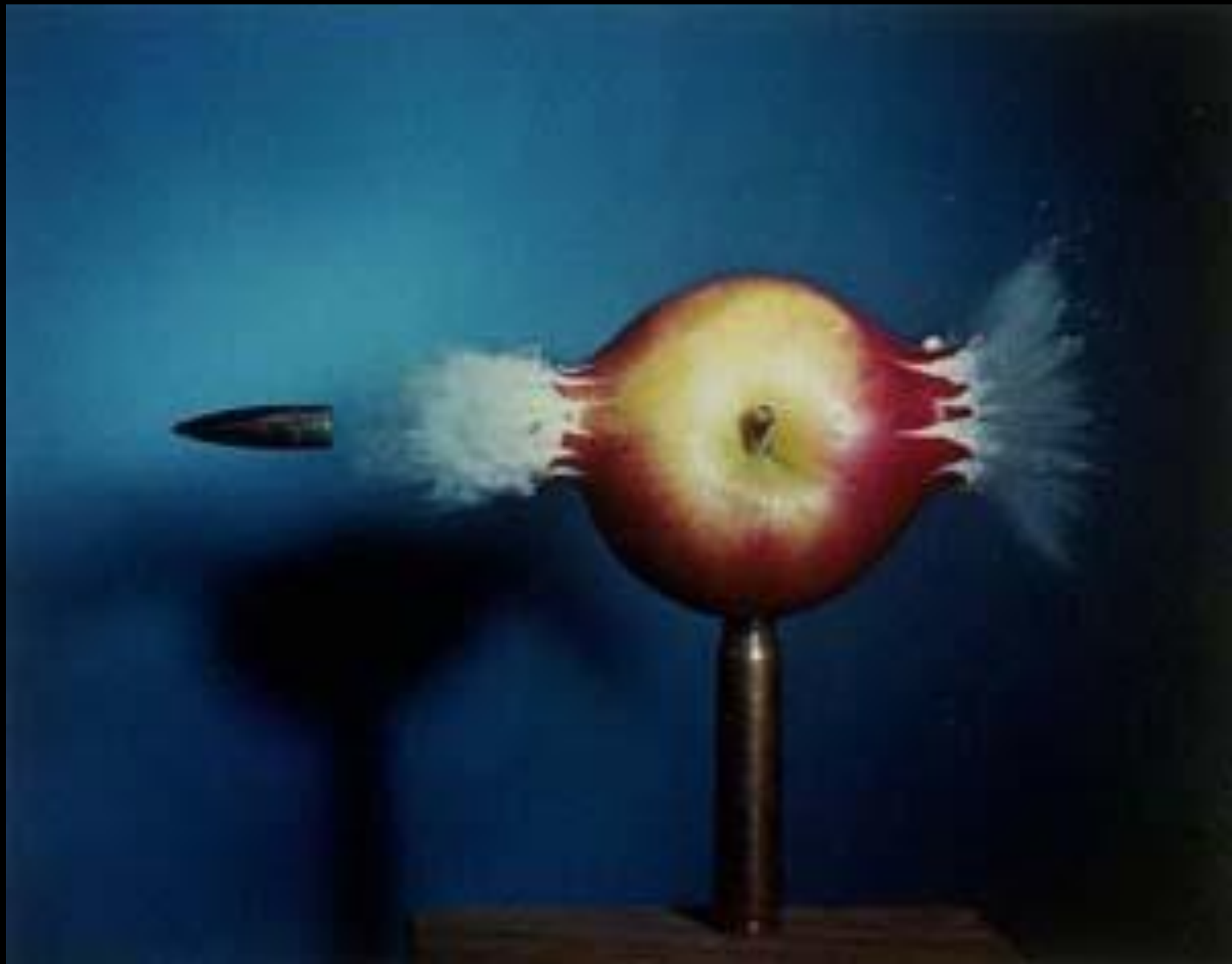
Karl Blossfeldt publishes *Art Forms in Nature*



1931: Development
of strobe photography
by Harold ("Doc")
Edgerton at MIT







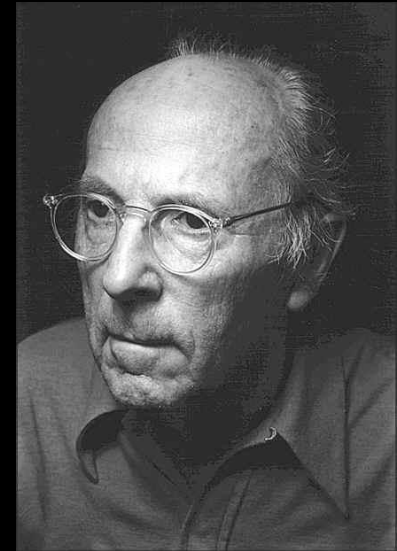
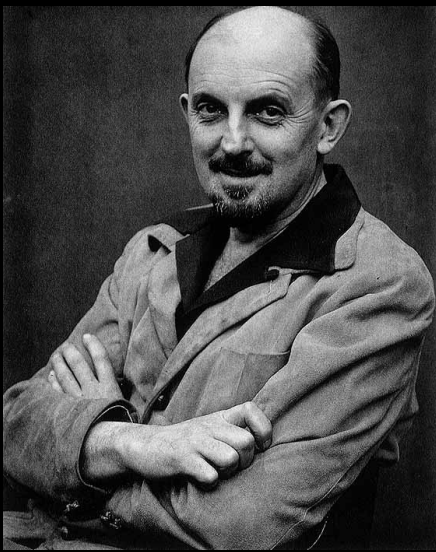




1932: Inception of Technicolor for movies, where three black and white negatives were made in the same camera under different filters

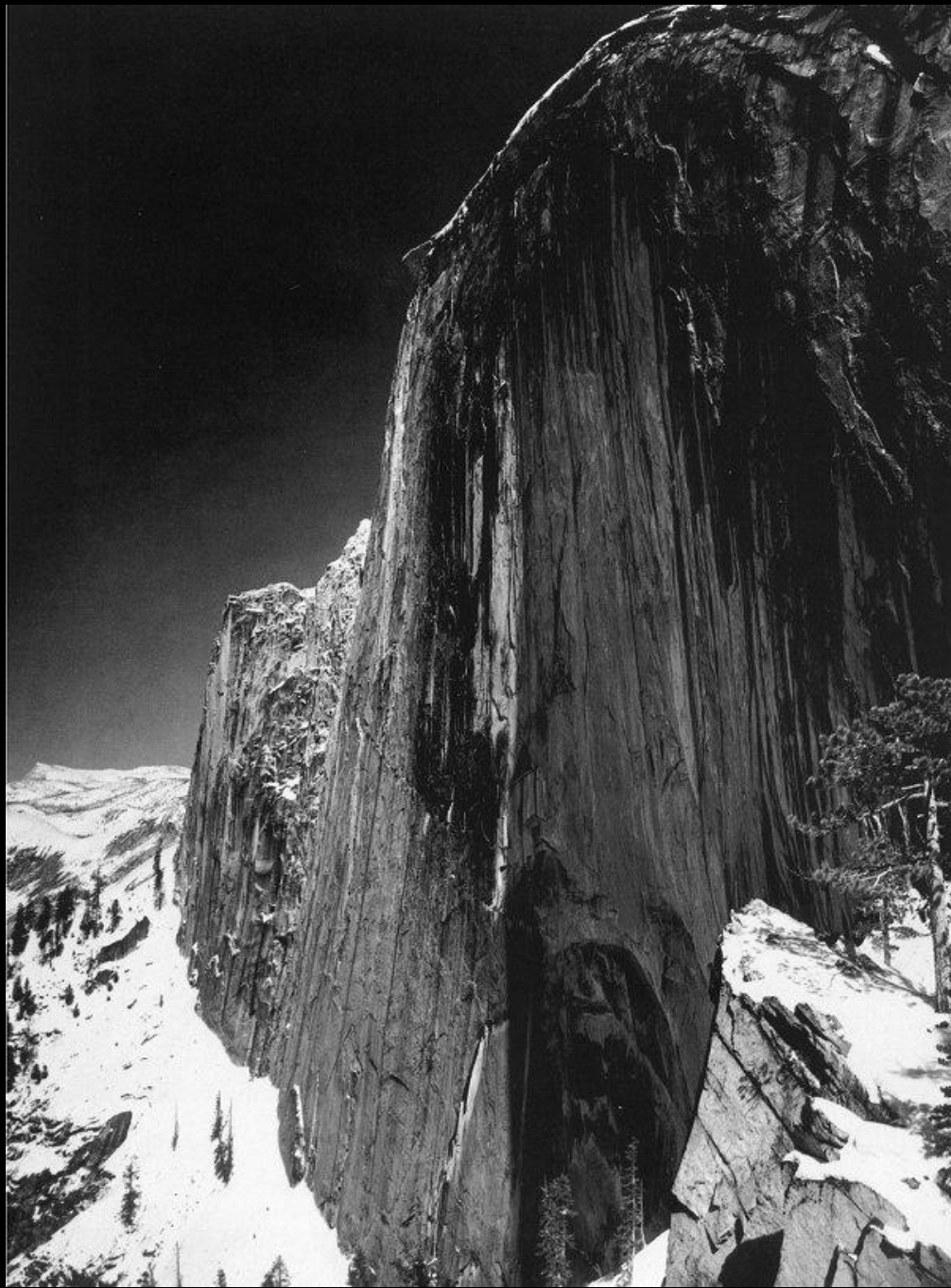


Ansel Adams, Imogen Cunningham, Willard Van Dyke, Edward Weston, et al, form Group f/64 dedicated to "straight photographic thought and production"





Ansel Adams







Imogen Cunningham





N3



Willard Van Dyke

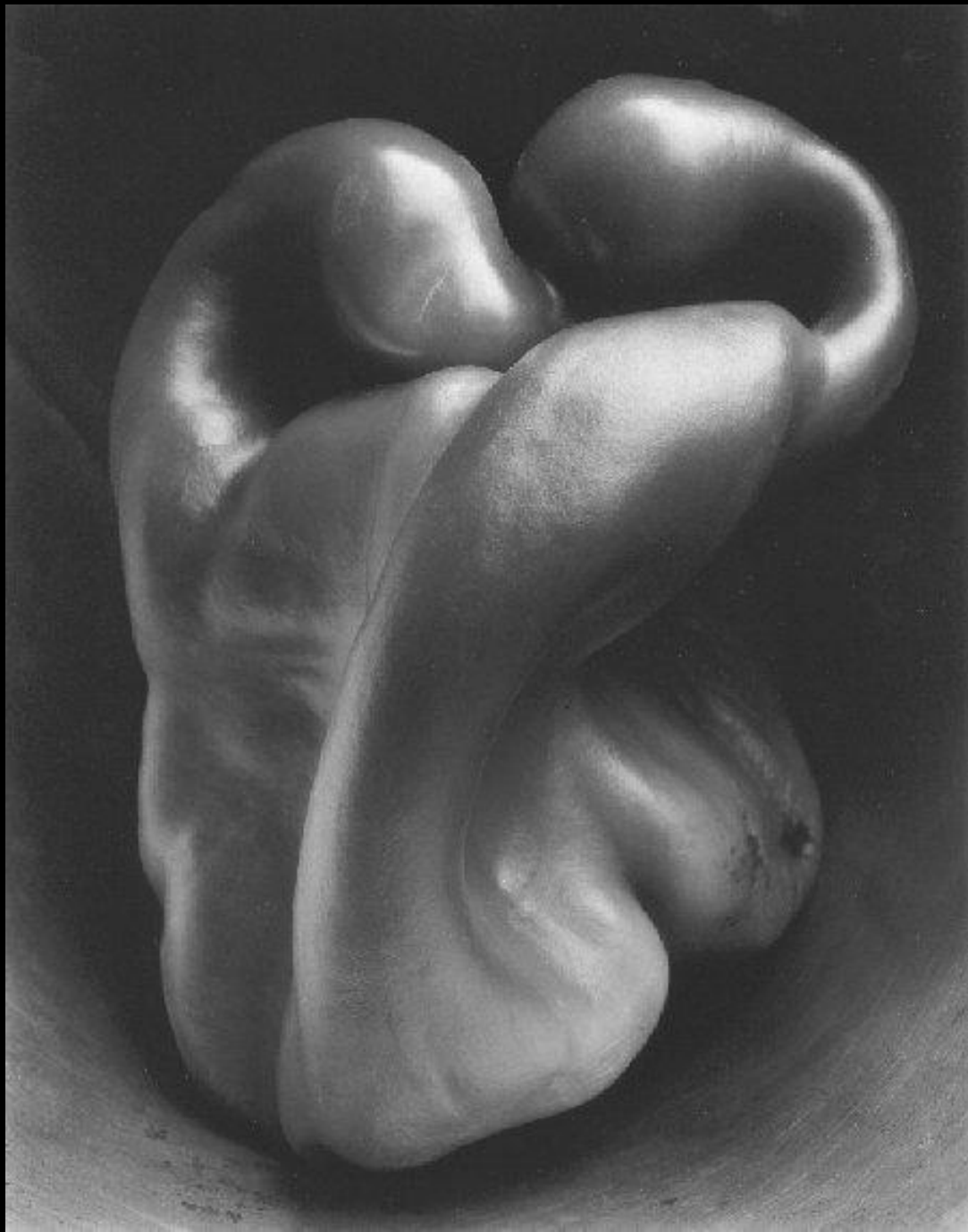






Edward weston

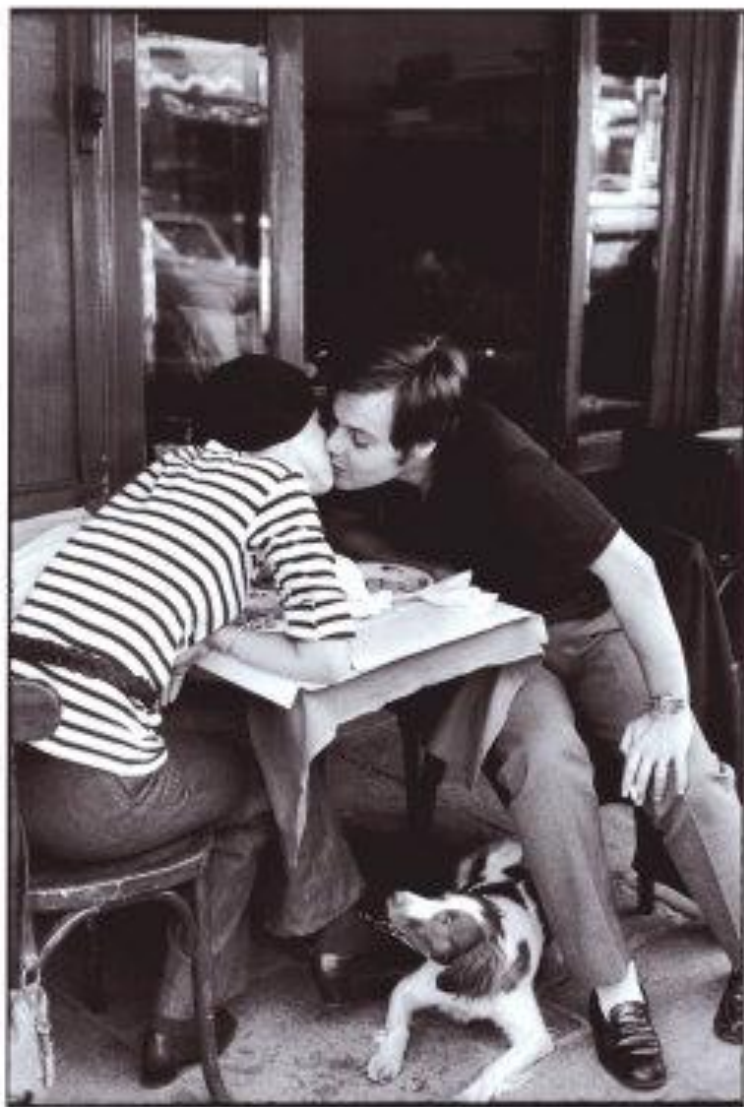




Henri Cartier-Bresson buys a Leica and begins a 60-year career photographing people







HENRI CARTIER-BRESSON

© 1997 by Magnum Photos, Inc.







March 14, 1932 George Eastman, aged 77,
writes suicide note--"My work is done. Why
wait?"--and shoots himself.

1933: Brassai publishes *Paris de nuit*







B R A S S A I

PONT NEUF, PARIS, 1949

© 2000

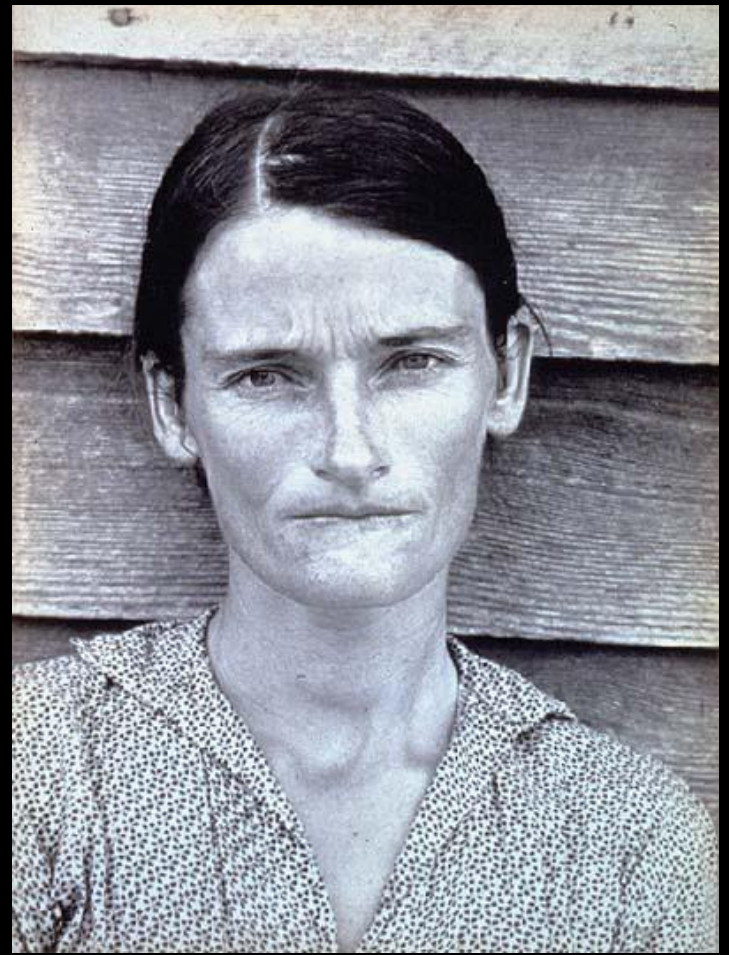
www.assoluto.com

1934: Fuji Photo Film founded. By 1938, Fuji is making cameras and lenses in addition to film.

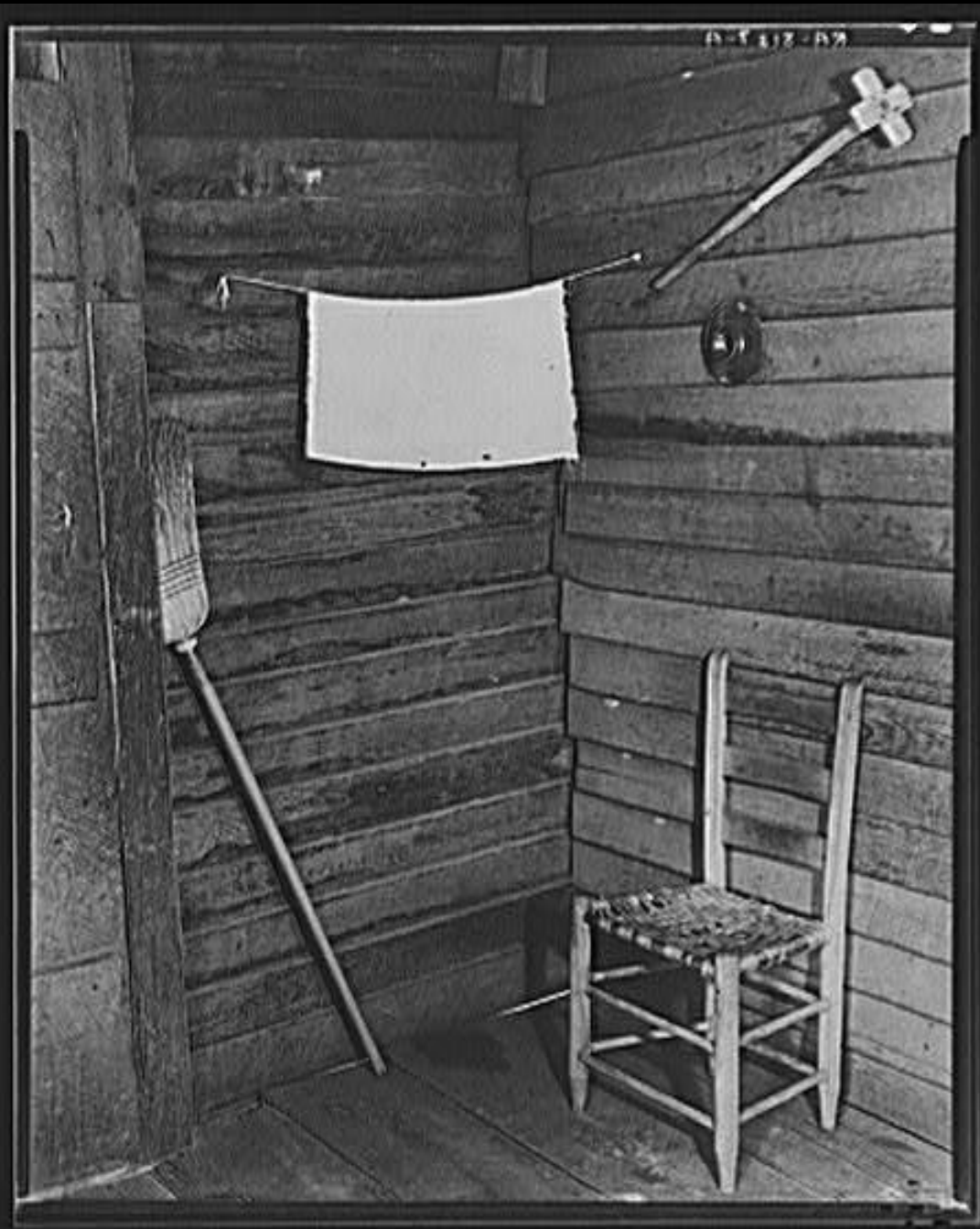


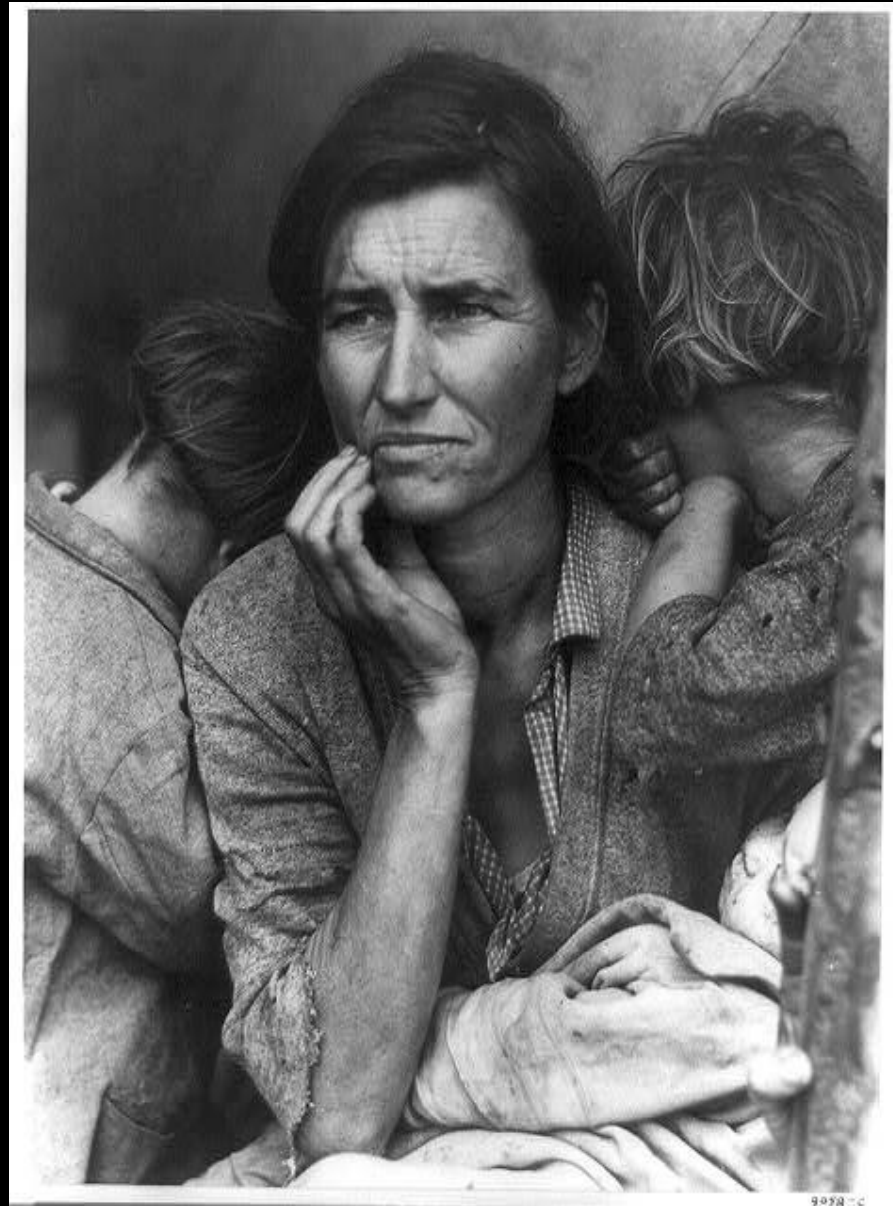
1935: Farm Security Administration hires Roy Stryker to run a historical section. Stryker would hire Walker Evans, Dorothea Lange, Arthur Rothstein, et al. to photograph rural hardships over the next six years. Roman Vishniac begins his project of the soon-to-be-killed-by-their-neighbors Jews of Central and Eastern Europe.





Walker Evans





Dorothea Lange





(c) retroneu.net





Arthur Rothstein





18541-C

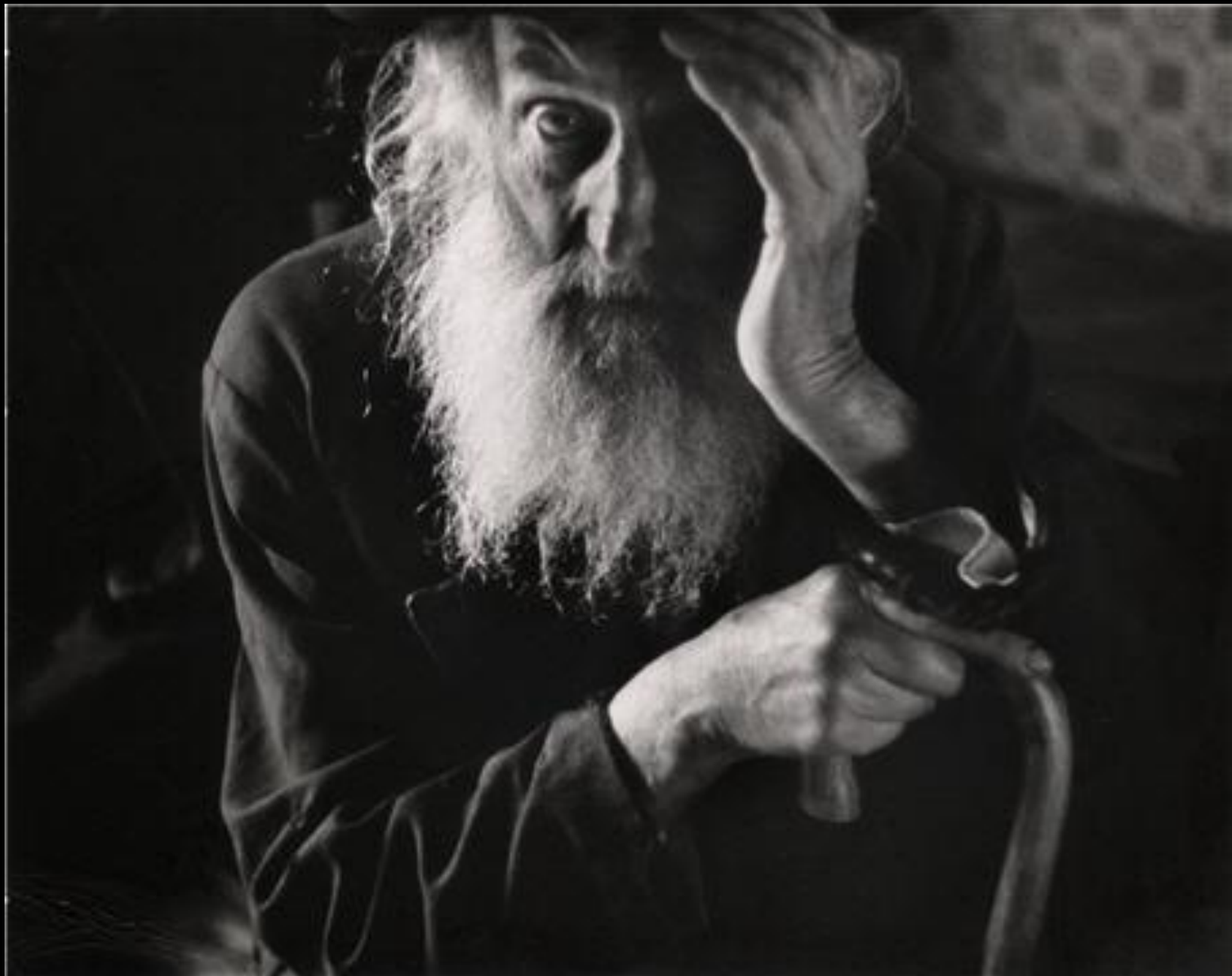




Roman Vishniac







1936: Development of Kodachrome, the first color multi-layered color film; development of Exakta, pioneering 35mm single-lens reflex (SLR) camera







Hindenburg Explosion 1937

LIFE

In action with the Navy off Vietnam

THE FLEET LASHES OUT



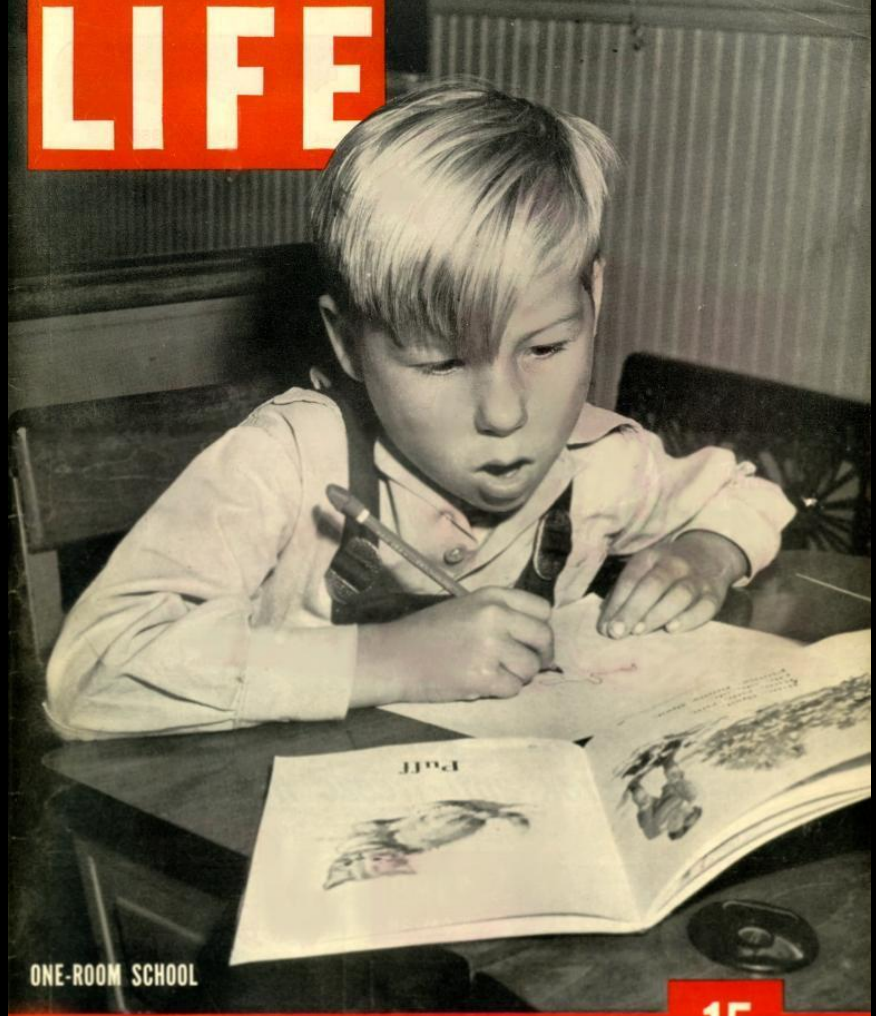
U.S.S. Oklahoma City shells the Vietcong

A TO SAN PLE COPYG4928200
BELMONT CA 94002

AUGUST 6 · 1965 · 35¢

Nov. 23, 1936

LIFE

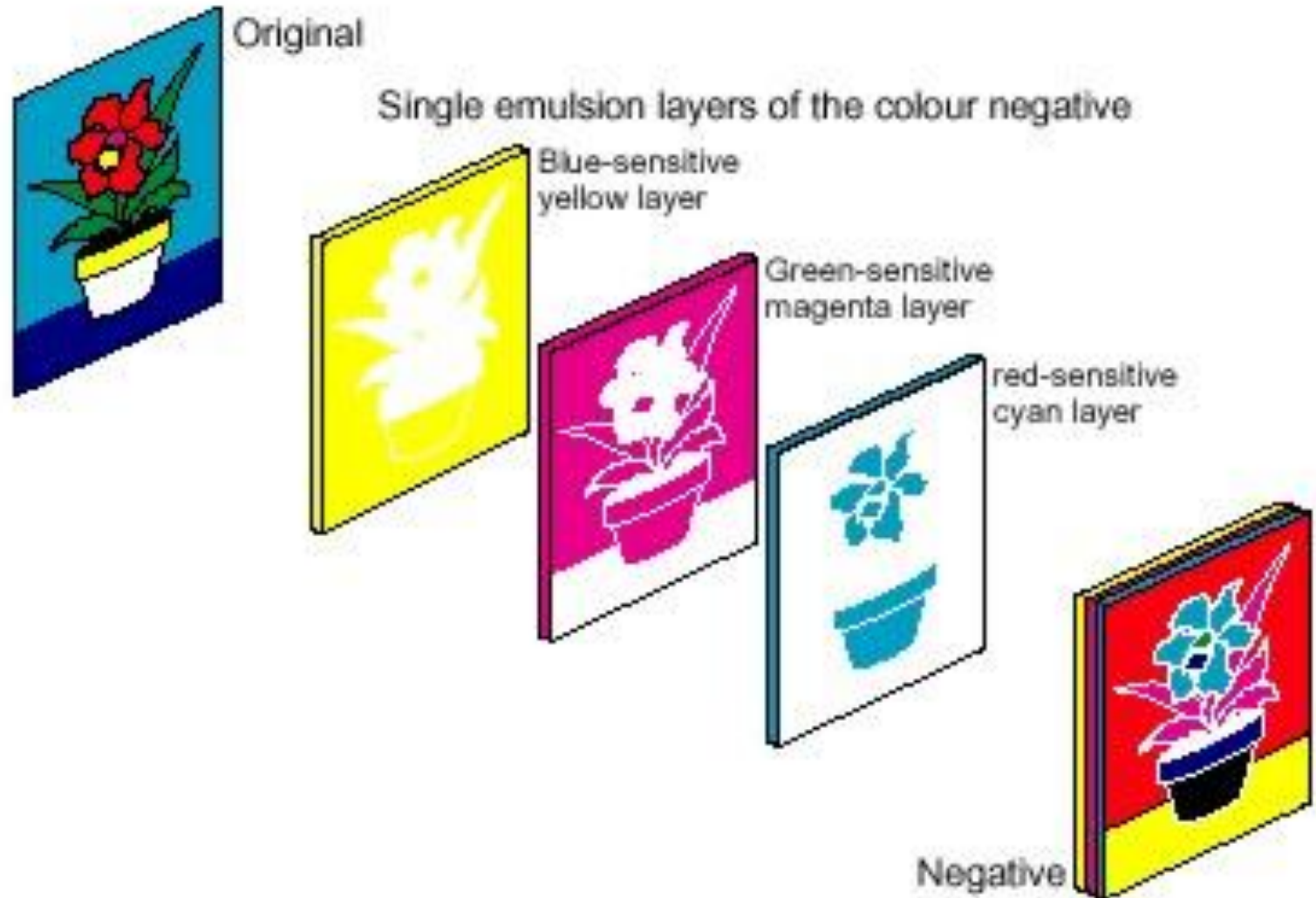


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YEARLY SUBSCRIPTION \$5.50

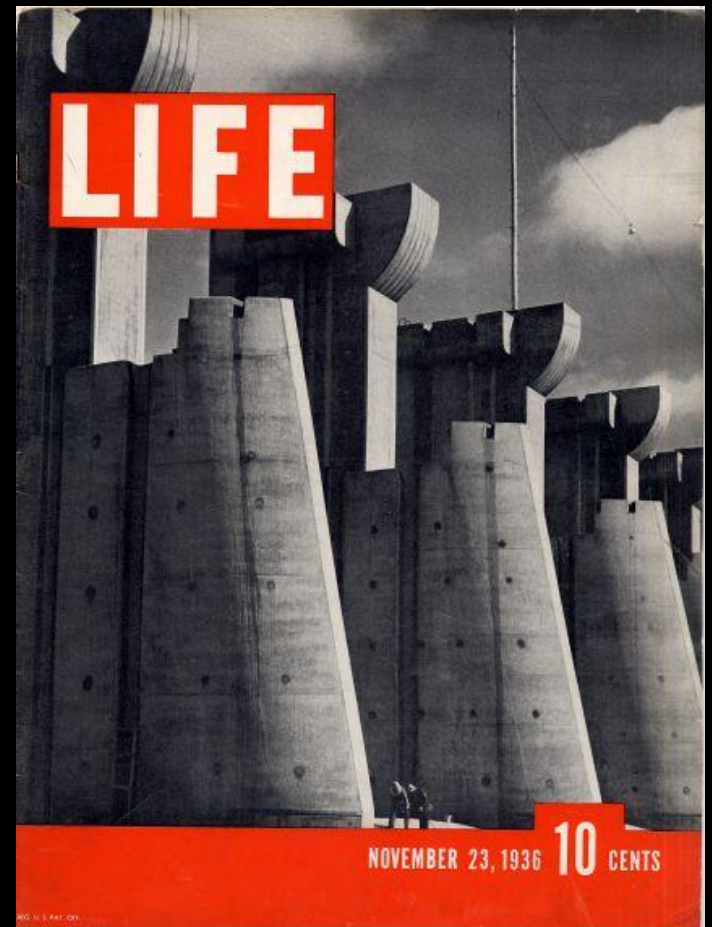
World War II

Further Development of the multi-layer color negative



LIFE magazine covers the war with help from Margaret Bourke-White, Robert Capa, Carl Mydans, and W. Eugene Smith

First Life color 1936





Margaret Bourke-White







WORLD'S HIGHEST STANDARD OF LIVING



*There's no way
like the
American Way*







Robert Capa, *Death of a Loyalist Soldier*, 1936.







Carl Mydans





Carl Taylor and Dick's Douglas-Duncan

Green 1950



W. Eugene Smith





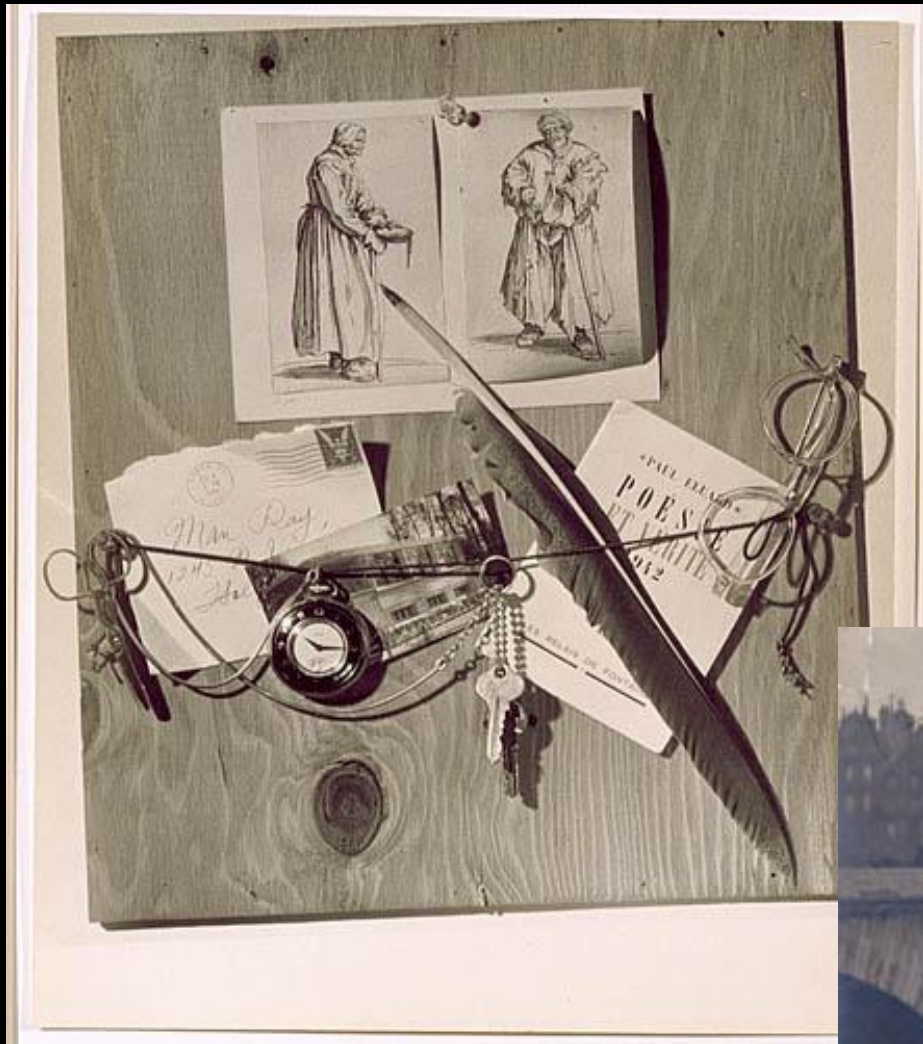


1947: Henri Cartier-Bresson, Robert Capa, and David Seymour start the photographer-owned Magnum picture agency





Man Ray

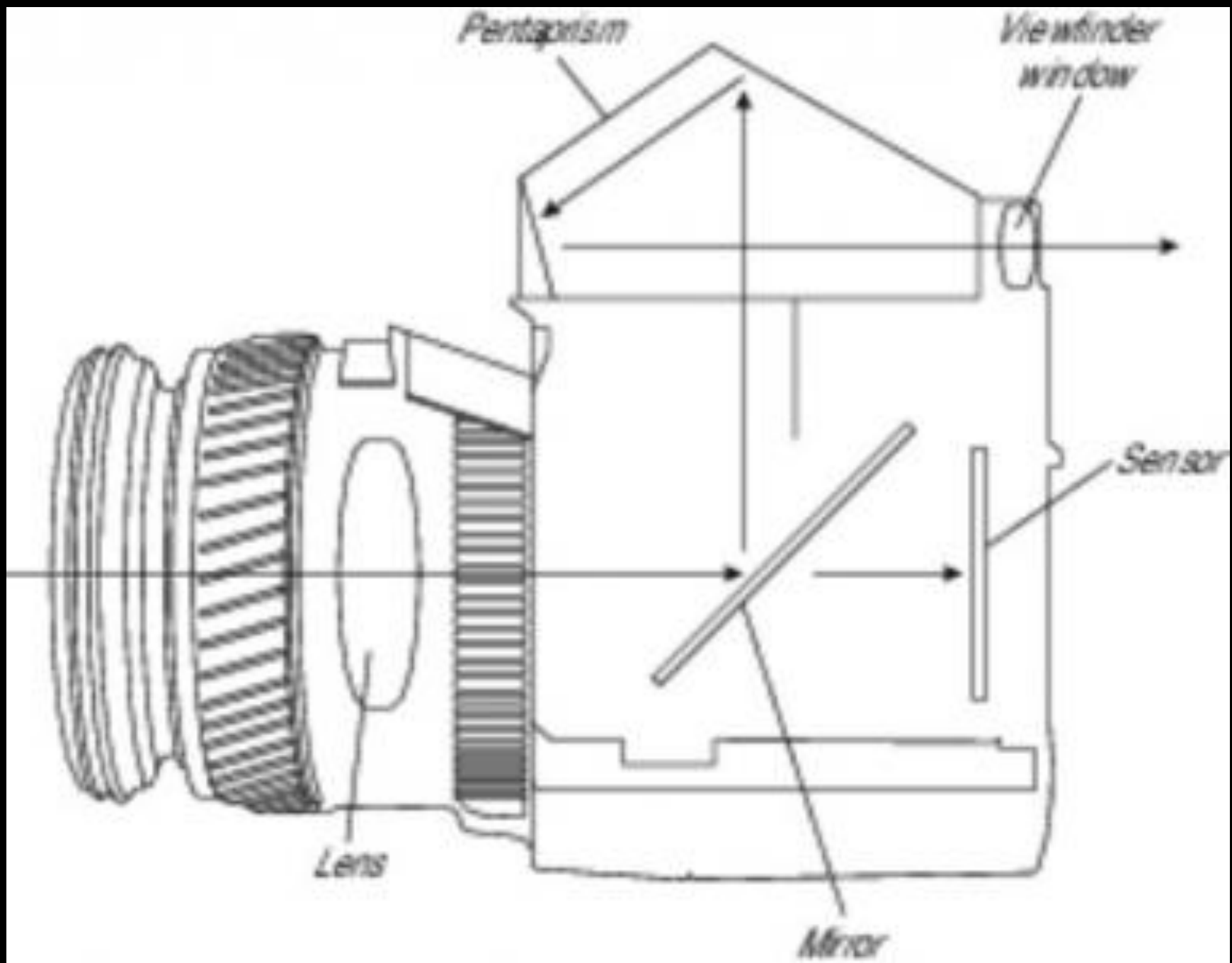


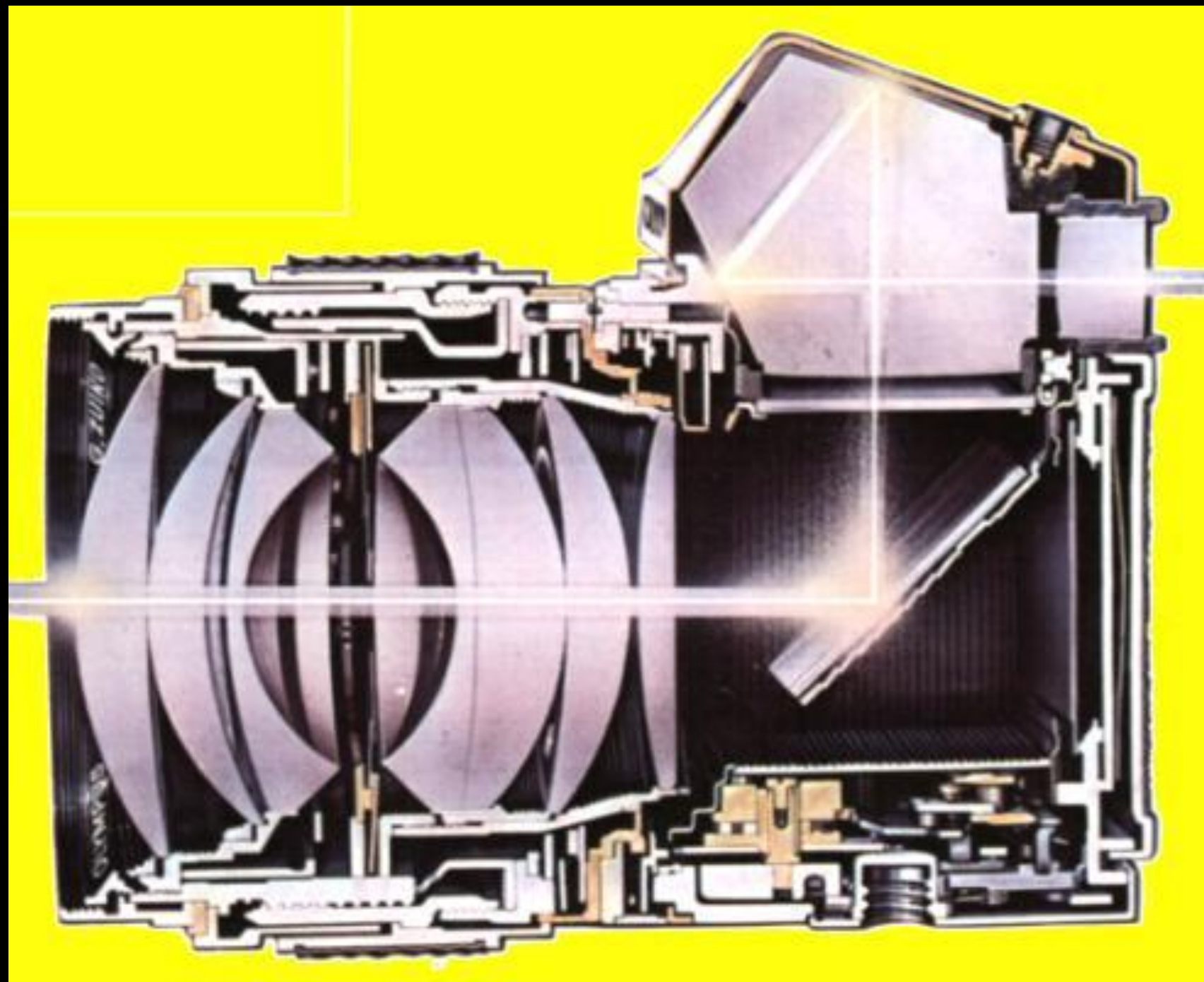
1948: Hasselblad in Sweden offers its first medium-format SLR for commercial sale; Pentax in Japan introduces the automatic diaphragm; Polaroid sells instant black and white film



1949: East German Zeiss develops the Contax S, first SLR with an unreversed image in a pentaprism viewfinder







1955: Edward Steichen curates Family of Man exhibit at New York's Museum of Modern Art



1959: Nikon F introduced





Speedgraphic Camera

Standard equipment for press photographers
in the 1960s

1960: Garry Winogrand begins photographing women on the streets of New York City.









1963: First color instant film developed by Polaroid



Instamatic released by Kodak



first purpose-built underwater introduced,
the Nikonos



1970: William Wegman begins photographing his Weimaraners.



1972: 110-format cameras introduced by Kodak with a 13x17mm frame



1973: C-41 color negative process introduced, replacing C-22



1975: Nicholas Nixon takes his first annual photograph of his wife and her sisters: "The Brown Sisters"

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Steve Sasson at Kodak builds the first working CCD-based digital still camera

Steven Sasson holds the prototype digital camera he built in 1975 at the Eastman Kodak Co. headquarters in Rochester, N.Y. It recorded a black-and-white image on a digital cassette tape.

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TIFF (Uncompressed) decompressor
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1976: First solo show of color photographs at the Whitney Museum of American Art :

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1977: Cindy Sherman begins work on Untitled Film Stills, completed in 1980

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TIFF (Uncompressed) decompressor
are needed to see this picture.

1977: Jan Groover begins exploring kitchen utensils

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1978: Hiroshi Sugimoto begins
work on seascapes.

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1980: Elsa Dorfman begins making portraits with the 20x24" Polaroid.

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TIFF (Uncompressed) decompressor
are needed to see this picture.

1982: Sony demonstrates Mavica "still video" camera

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1983: Kodak introduces disk camera, using an 8x11mm frame (the same as in the Minox spy camera)

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Richard Avedon “In the American West”

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QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

1987: The popular Canon EOS system introduced, with new all-electronic lens mount

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1985: Minolta markets the world's first autofocus SLR system (called "Maxxum" in the US)

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1990: Adobe Photoshop 1.0 released.

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QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

1991: Kodak DCS-100, first digital SLR, a modified Nikon F3

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1992: Kodak introduces PhotoCD

QuickTime™ and a
TIFF (Uncompressed) decompressor
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Sebastiao Salgado publishes Workers

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are needed to see this picture.

QuickTime™ and a
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Mary Ellen Mark publishes book documenting life in an Indian circus.

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TIFF (Uncompressed) decompressor
are needed to see this picture.

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

1995: Material World, by Peter Menzel published.

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TIFF (Uncompressed) decompressor
are needed to see this picture.

QuickTime™ and a
IFF (Uncompressed) decompressor
are needed to see this picture.

1997: Rob Silvers publishes Photomosaics

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TIFF (Uncompressed) decompressor
are needed to see this picture.

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

1999: Nikon D1 SLR, 2.74 megapixel for \$6000, first ground-up DSLR design by a leading manufacturer.

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

2000: Camera phone introduced in Japan by Sharp/J-Phone

QuickTime™ and a
TIFF (Uncompressed) decompresso
are needed to see this picture.

2001: Polaroid goes bankrupt

2003: Four-Thirds standard for compact digital SLRs introduced with the Olympus E-1

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Canon Digital Rebel introduced for less than \$1000

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

2004: Kodak ceases production
of film cameras

2005: Canon EOS 5D, first
consumer-priced full-frame
digital SLR, with a 24x36mm
CMOS sensor for \$3000

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.