

History of photography (part 1): age of portraits

CS 178, Spring 2011

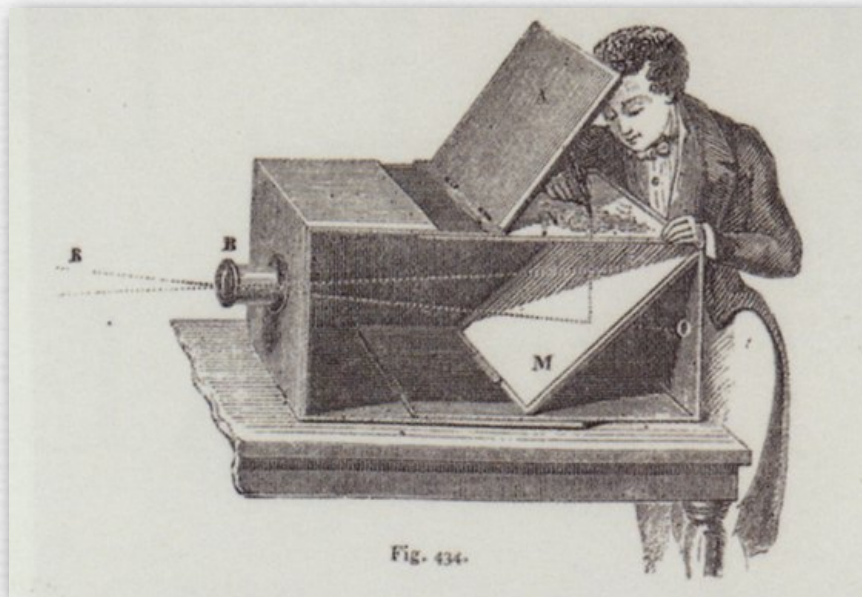


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Outline

- ◆ invention of photography
- ◆ daguerreotypes and the age of portraits
- ◆ more in later lectures...

The *camera obscura*



(Gustavson)



Vermeer, *The Music Lesson* (c. 1665)

Nicéphore Niépce (1765-1833)

- ◆ first photographic image



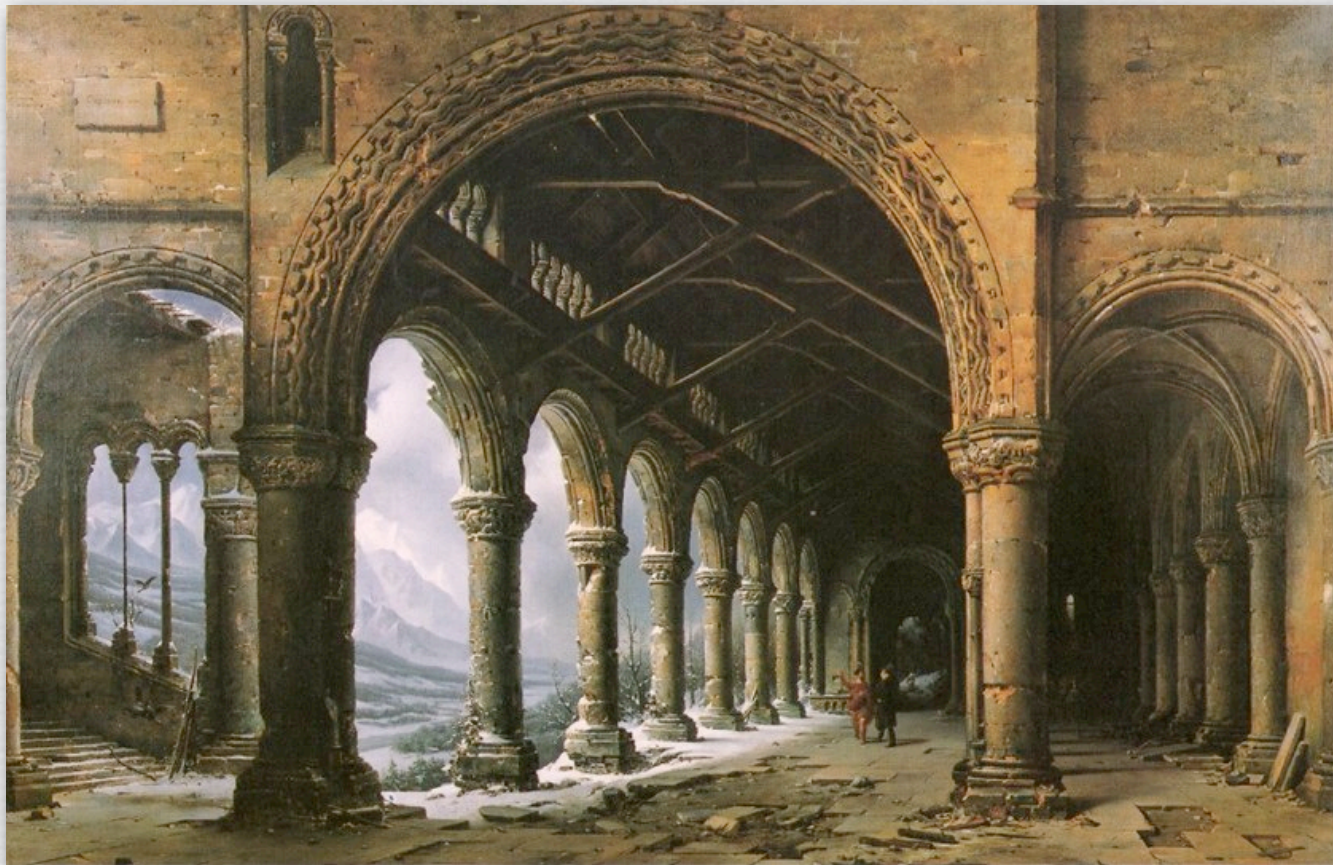
View from the window at Le Gras, 1826



- bitumen on pewter plate
- 8-hour exposure

Louis Daguerre (1787-1851)

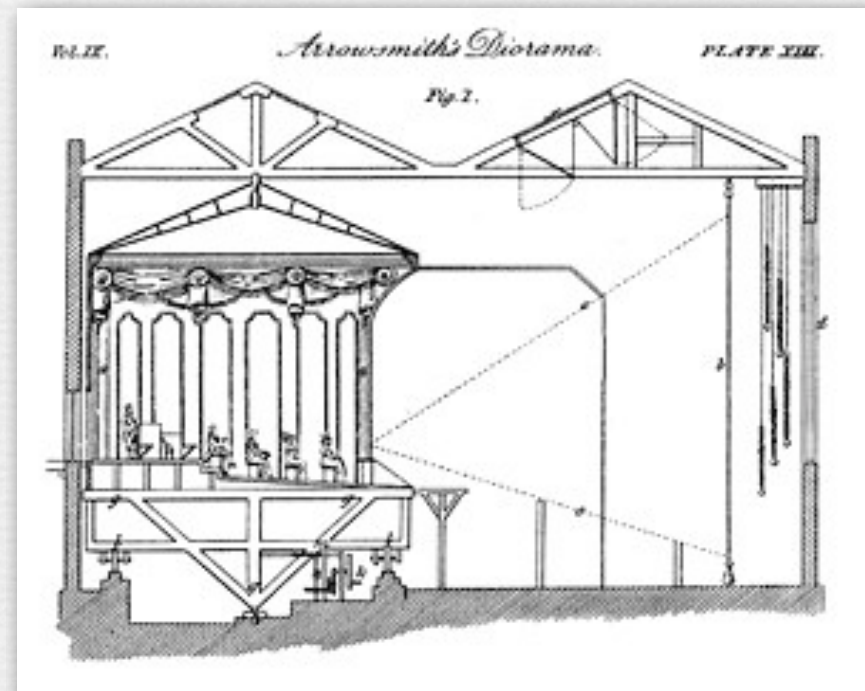
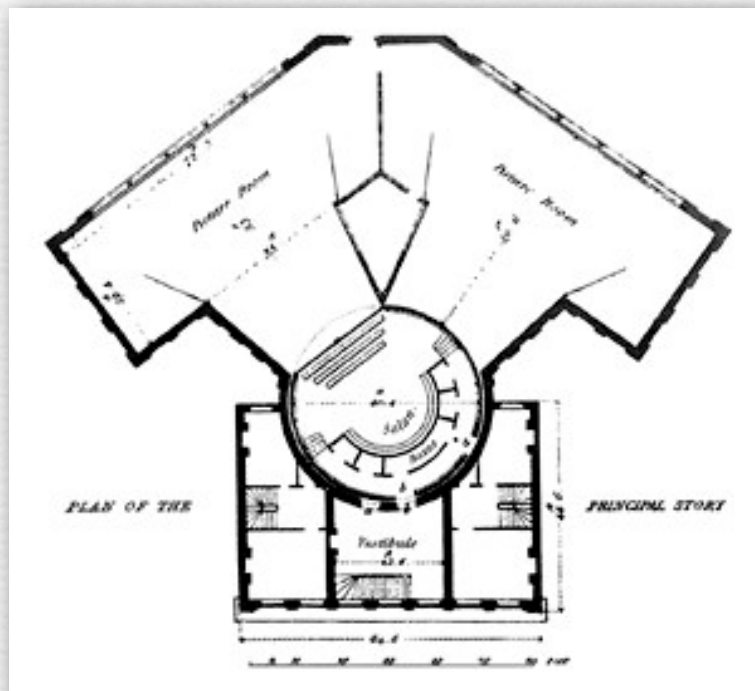
◆ painter



The Effect of Fog and Snow Seen through
a Ruined Gothic Colonnade, 1826

Louis Daguerre (1787-1851)

- ◆ inventor of the diorama



Diorama in Regent's Park, London, 1823

Louis Daguerre (1787-1851)



modern diorama at the
American Museum of Natural History

Louis Daguerre (1787-1851)

◆ the daguerreotype



(Newhall)

Still life, 1837

- silver halide on polished metal
- no negative, so cannot reproduce
- tone reversal unless lit carefully

Louis Daguerre (1787-1851)

◆ the daguerreotype



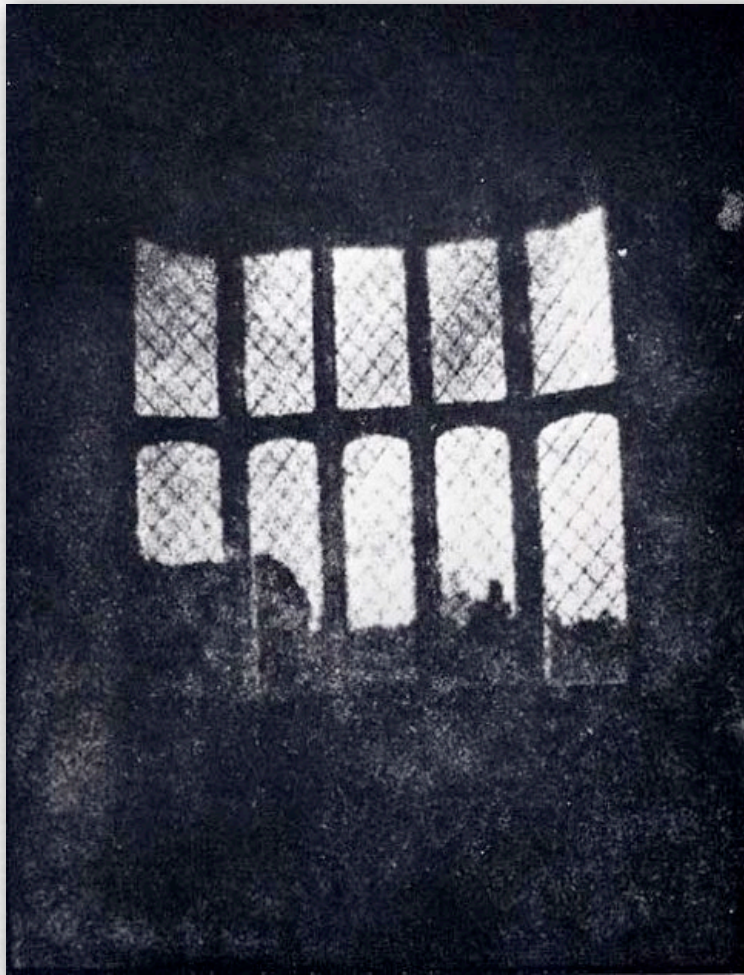
(Newhall)

Still life, 1837

- silver halide on polished metal
- no negative, so cannot reproduce
- tone reversal unless lit carefully

William Talbot (1800-1877)

◆ the calotype



- paper impregnated with silver chloride
- fading arrested with hyposulfite of soda (“hypo”)
- negative, so allows any number of positive prints
- name “photography” suggested by F. W. Herschel

Latticed window at Lacock Abbey, 1835

The daguerreotype portrait



(Rosenblum)

- sitter's head stabilized with a metal brace
- hands clenched to avoid movement

making a daguerreotype, 1843

The daguerreotype camera

f/15

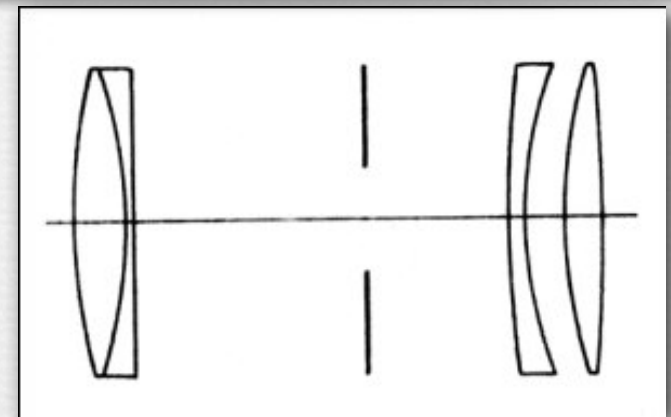
(Gustavson)



Giroux camera, 1839

manual shutter

I apologize for messing up this calculation in class. The Petzval lens increased the available light 20x. This corresponds to an aperture 20x larger in area, or $\sqrt{20}$ larger in diameter, or 4.5 doublings of the aperture diameter. The correct calculation for the pre-Petzval lens is thus $f/3.7 \times \sqrt{20} = 3.7 \times 4.5 = f/16.7$.



Petzval's lens, 1840

- f/3.7 instead of f/16.7
- reduced exposure time 20x
- exposure still 5-8 seconds

The daguerreotype portrait



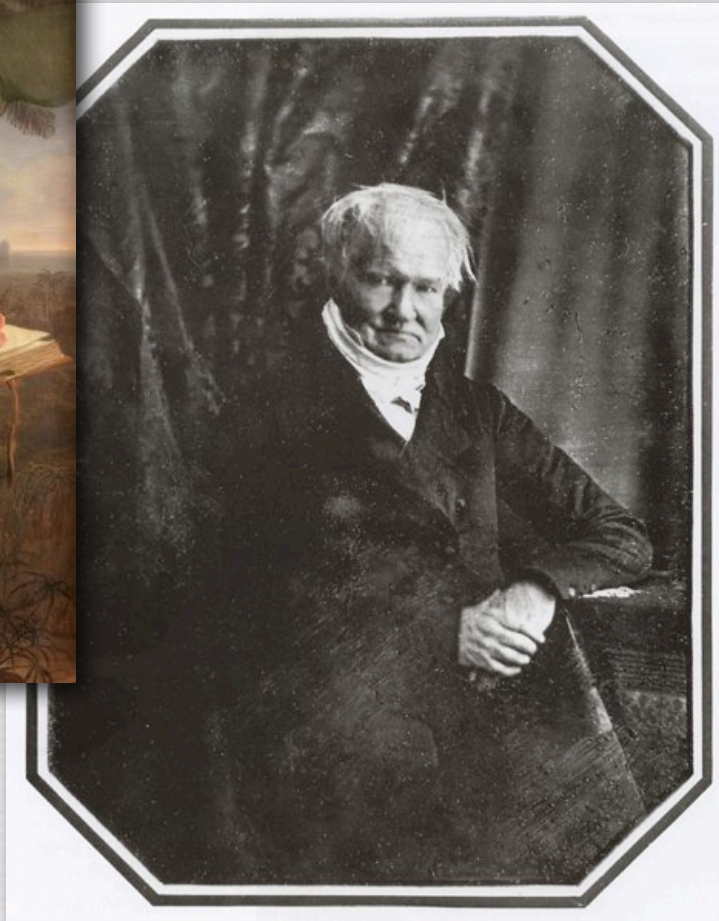
(Rosenblum)

Gustav Oehme, Three Young Girls, c. 1845

Pop quiz - who are these people?



painting of Humboldt
by Friedrich Weitsch
(1806)



Alexander von Humboldt, 1847

(photograph by Hermann Blow)

(Rosenblum)

- naturalist and explorer of Central and South America
- father of modern meteorology
- magnetic declination, igneous origin of rocks, etc.

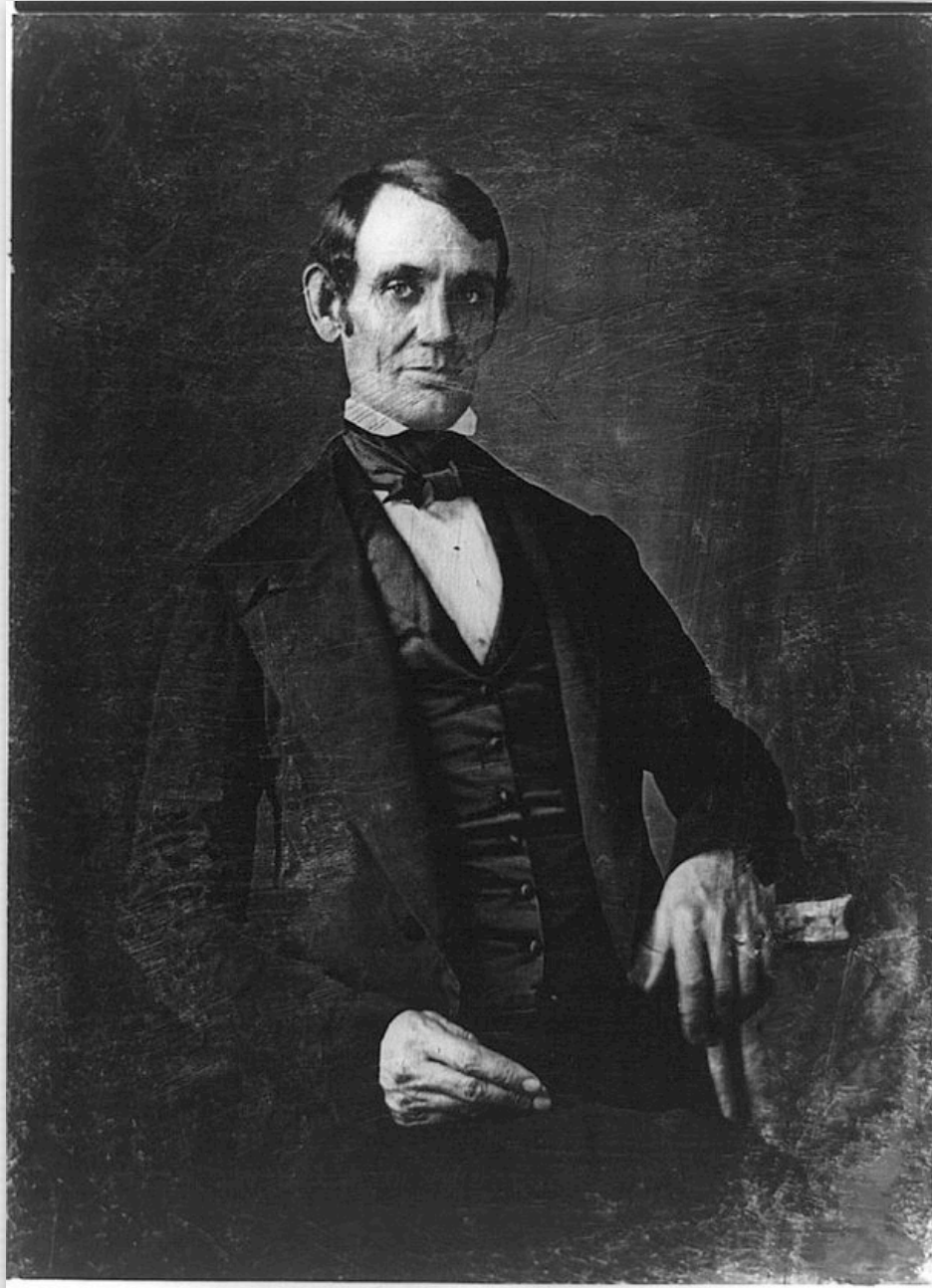


painting by Morse
of Mrs. Bacot
(1830)



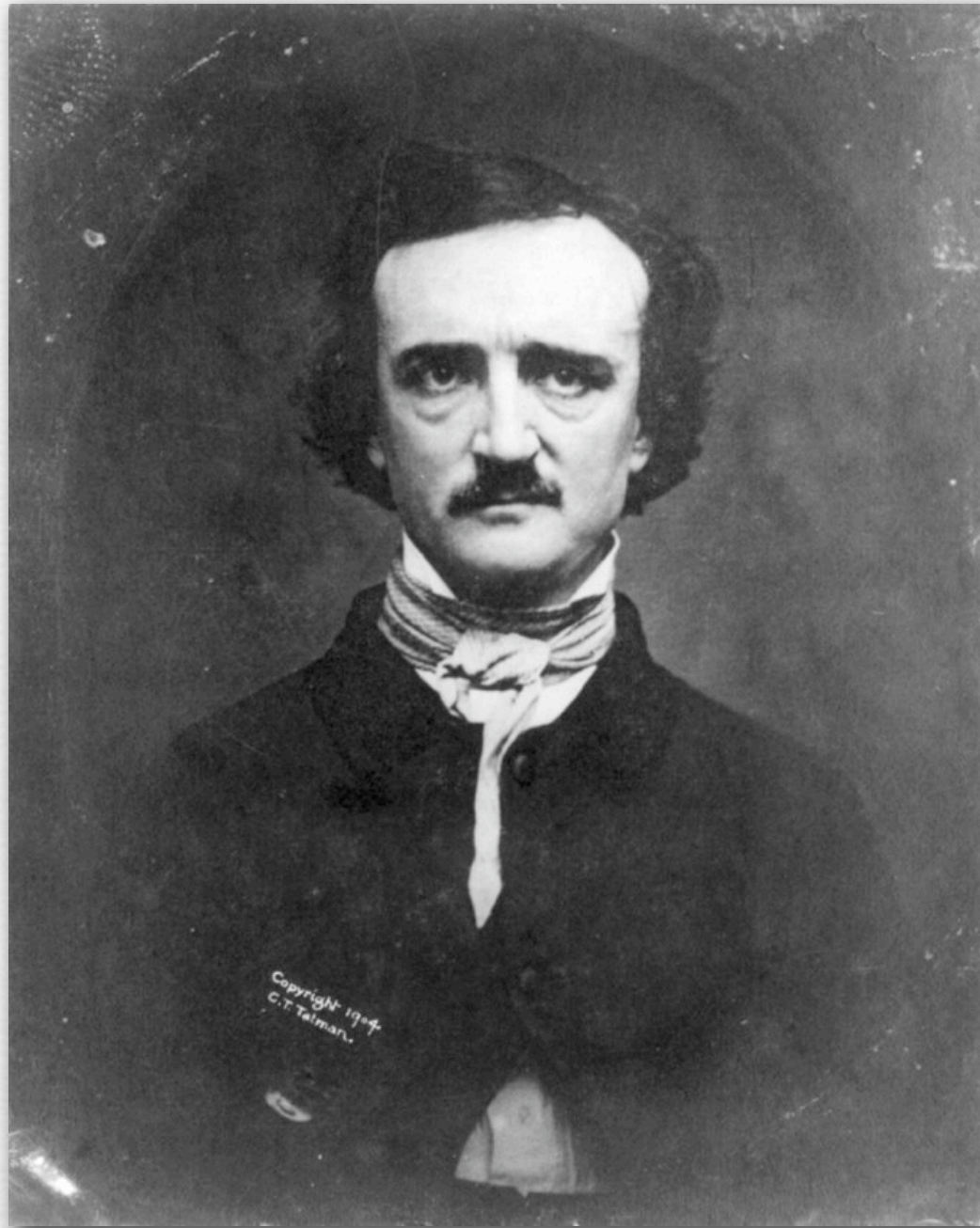
Samuel Morse, ca. 1845

- inventor of telegraph
(and Morse code)
- painter



Abraham Lincoln, c. 1846

(photograph by Nicholas Shepherd)



Edgar Allen Poe, 1848
(photograph by W.S. Hartshorn)



photograph by
Lewis Caroll
of Alice Lidell
(1858)



(Rosenblum)

- mathematician and author of children's books (*Alice in Wonderland*)
- albumen print (from here on)

Lewis Caroll, 1863

(photograph by Oscar Rejlander)



(Rosenblum)

- most famous actress of the 19th century (“divine Sarah”)

Sarah Bernhardt, 1865

(photograph by Gaspard Tournachon)



Virginia Woolf



(Rosenblum)

- mother of author Virginia Woolf

Julia Jackson, 1867

(photograph by Julia Margaret Cameron)

Slide credits

- ◆ Newhall, B., *The History of Photography*, Little, Brown & Co., 1982.
- ◆ Rosenblum, N., *A World History of Photography* (4th ed.), Abbeville Press, 2007.
- ◆ Gustavson, T., *Camera*, Sterling Publishing, 2009.
- ◆ <http://wikipedia.org>