

# History of photography (part 2): documenting the world

CS 178, Spring 2009

---



Marc Levoy  
Computer Science Department  
Stanford University

# Outline

---

- ◆ everyday scenes
- ◆ architecture and archaeology
- ◆ wonders of the industrial age
- ◆ notable events
- ◆ the beginning of photojournalism
- ◆ wet plate photography
- ◆ Matthew Brady and the Civil War
- ◆ surveying the West

# Everyday scenes

---



(Rosenblum)

Porta della Ripetta, Rome, 1846

(photograph by Calvert Jones)

# Everyday scenes

---

(Gardner)

(Rosenblum)



Banks of the Seine at Sèvres, 1851

(photograph by Victor Regnault)



Harbor of La Rochelle, 1851

(painting by Corot)

# Architecture and archaeology

---

(Newhall)



The Parthenon, 1869

(photograph by William James Stillman)

# Architecture and archaeology

(Newhall)

(Marc Levoy)



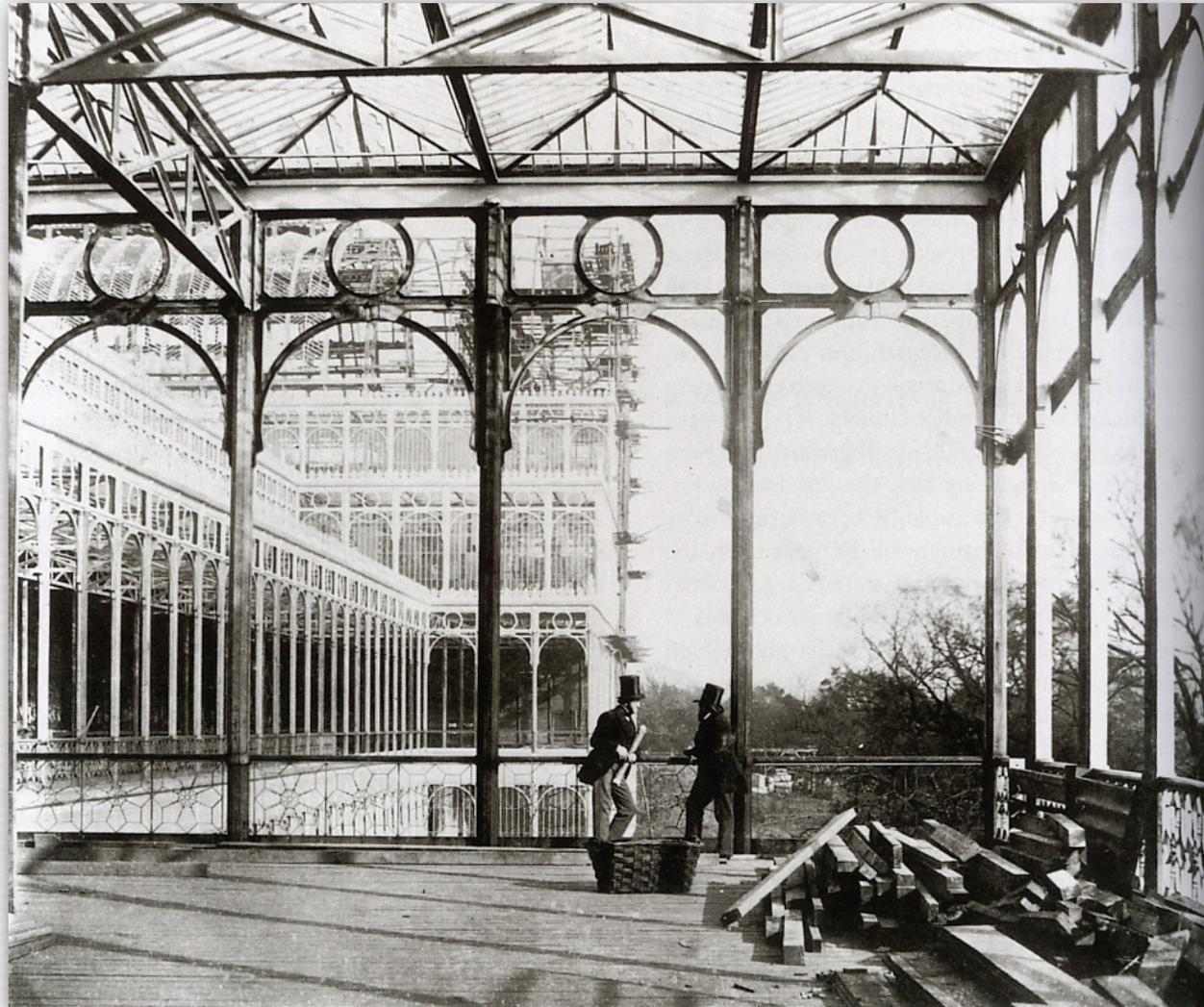
Notre Dame cathedral, 1851

(photograph by Charles Negre)



# Wonders of the industrial age

---



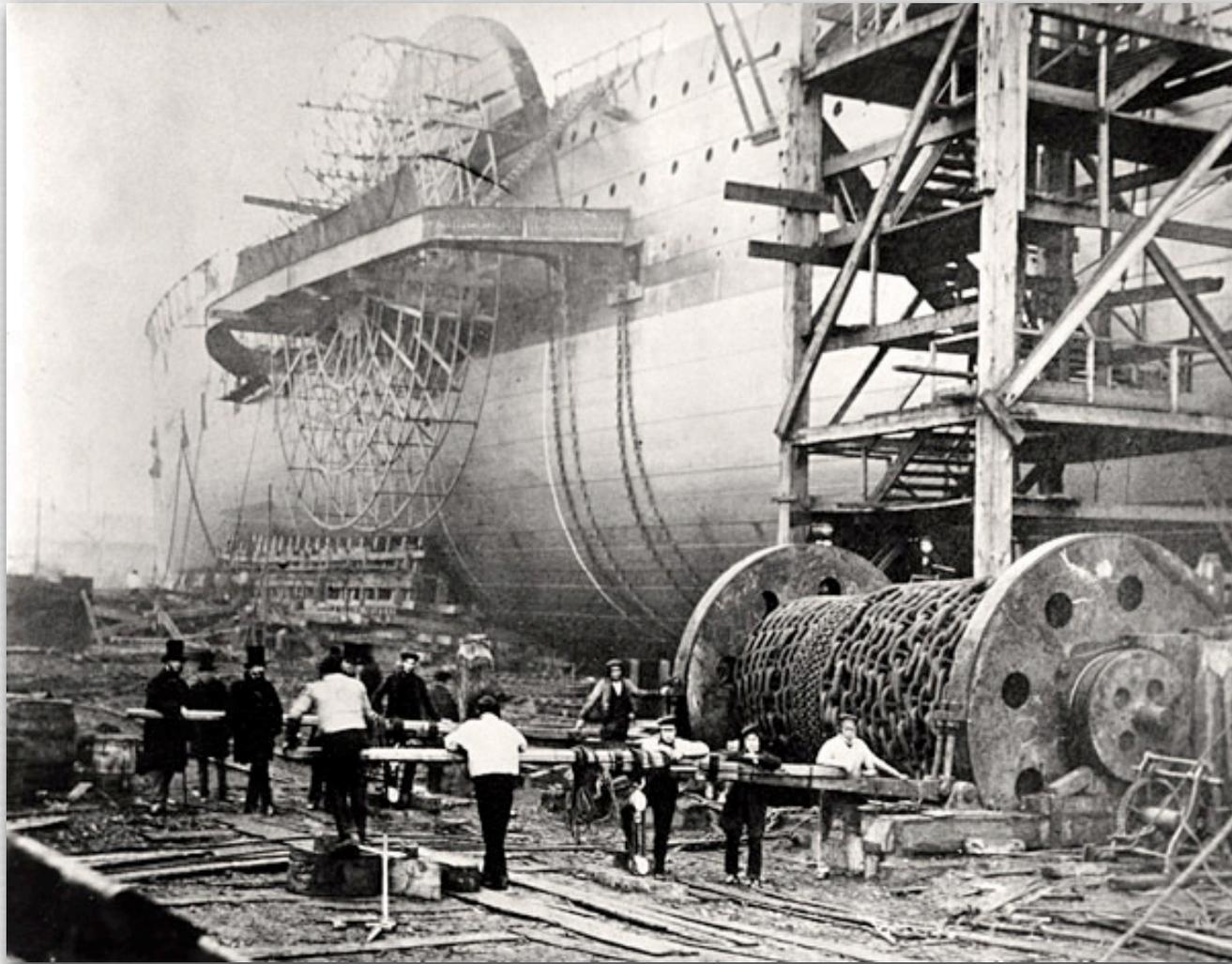
(Rosenblum)

The Crystal Palace, London, c. 1853

(photograph by Philip Henry Delamotte)

# Wonders of the industrial age

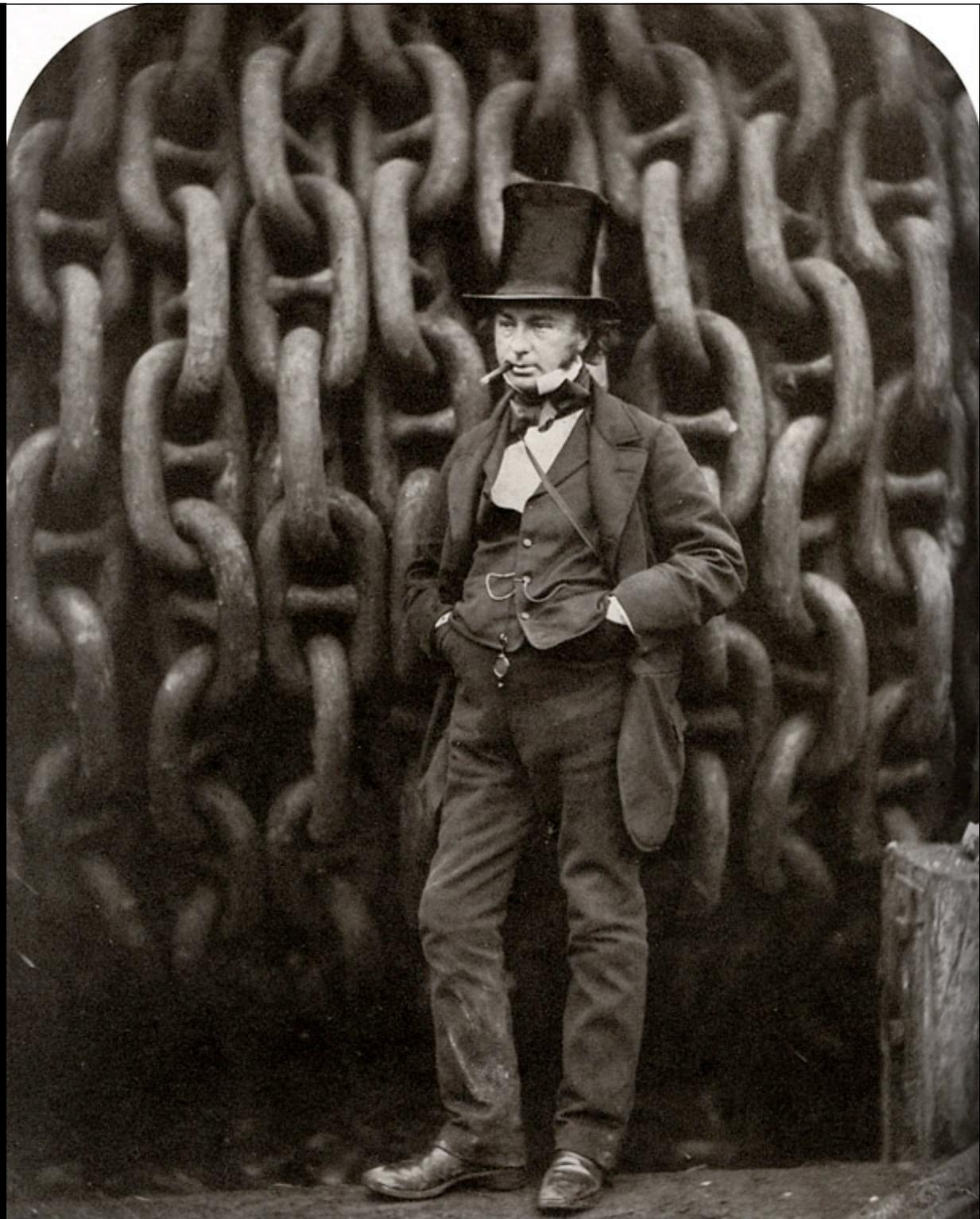
---



The Great Eastern being launched, 1858

(photographer unknown)

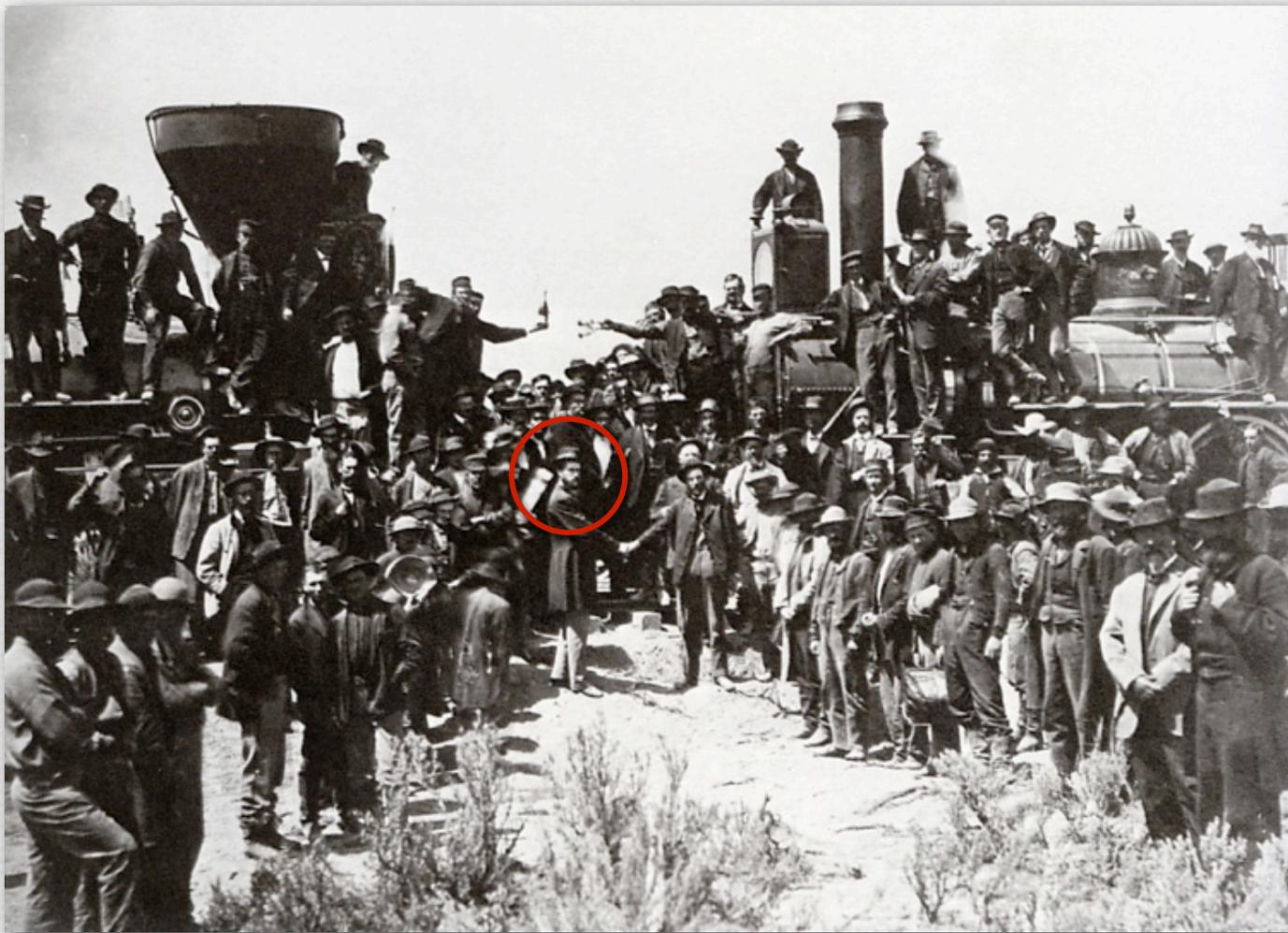
(Newhall)



Isambard Brunel,  
Builder of the Great Eastern  
(photograph by Robert Howlett)

# Notable events

---



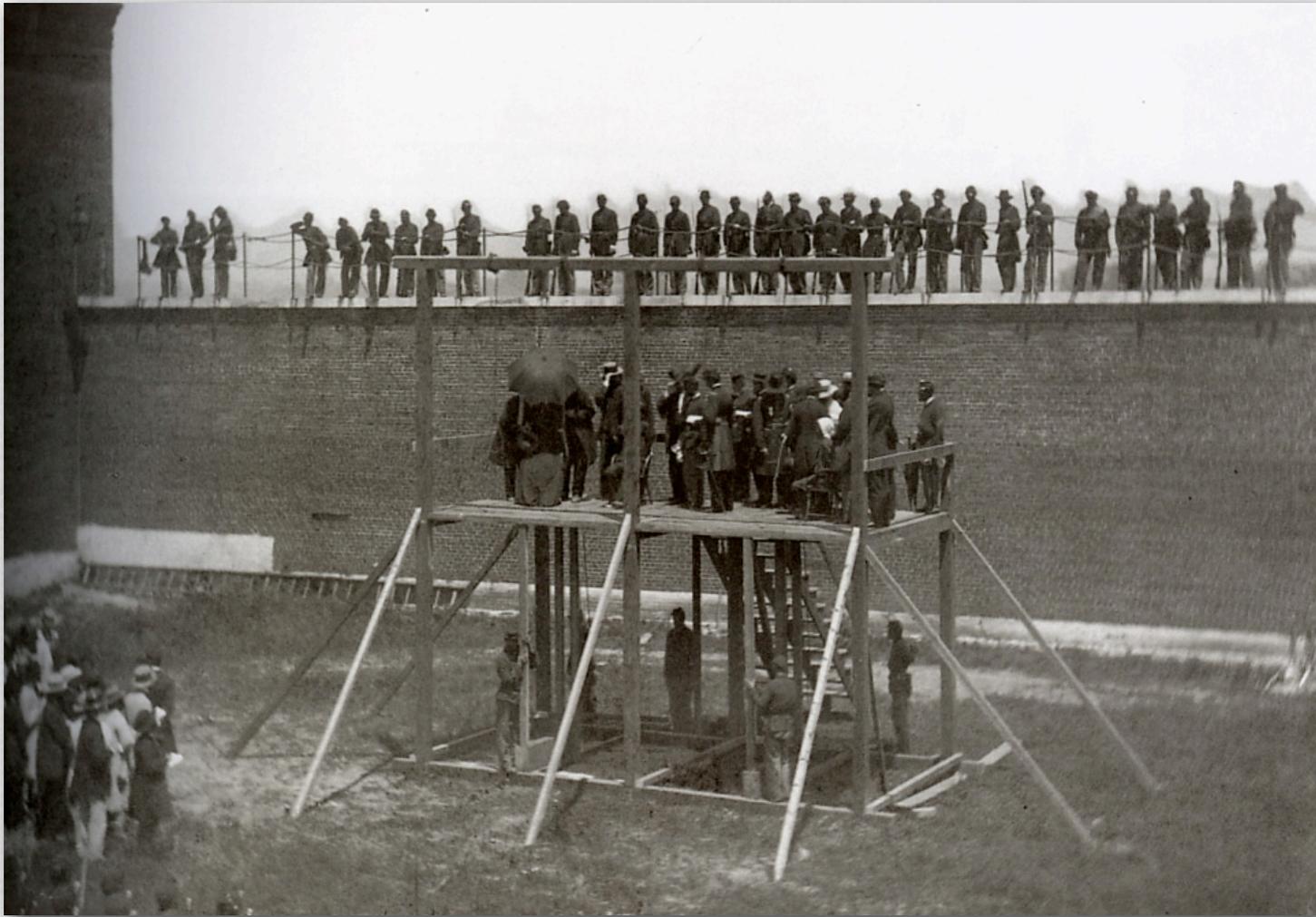
(Newhall)

Meeting of the Rails, 1869

(photograph by Andrew J. Russell)

# The beginnings of photojournalism

---



(Rosenblum)

# The beginnings of photojournalism

---



(Rosenblum)

Execution of the co-conspirators, 1865

(photograph by Alexander Gardner)

# The beginnings of photojournalism

---

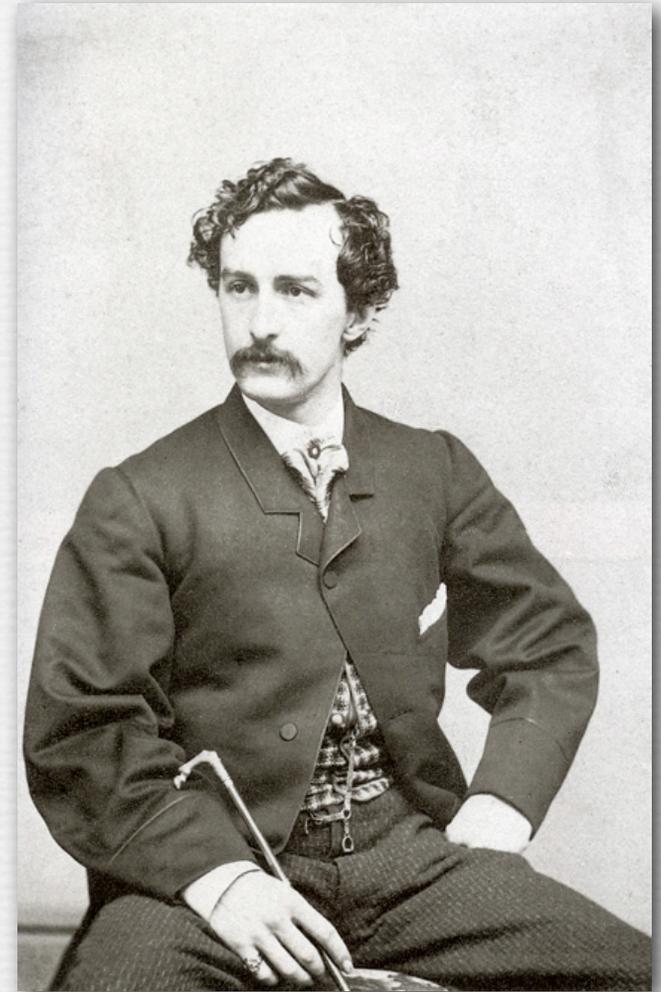
(Library of Congress)



Abraham Lincoln, 1865

(photograph by Alexander Gardner)

(Rosenblum)



John Wilkes Booth

# Wet-plate collodion photography

---

- ◆ developed in 1851 by Frederick Scott Archer
  - clean the glass plate (extremely well)
  - flow the glass plate with "salted" (iodide/bromide) collodion
  - immerse the plate in a silver nitrate bath (for 3-5 minutes)
  - expose the plate (from one second to several minutes)
  - develop the plate (using an ferrous sulfate based developer)
  - fix the plate (with potassium cyanide or sodium thiosulfate)
- ◆ any number of prints can be made
- ◆ exposure must immediately follow silvering, so requires a traveling darkroom

# Matthew Brady (1822-1896)



(wikipedia)

(Rosenblum)



a wet plate photographer at work, circa 1877

(illustrator unknown)

# Matthew Brady and the Civil War

---



(Garrison)

Colonels of the 164th New York Cavalry

# Matthew Brady and the Civil War

---

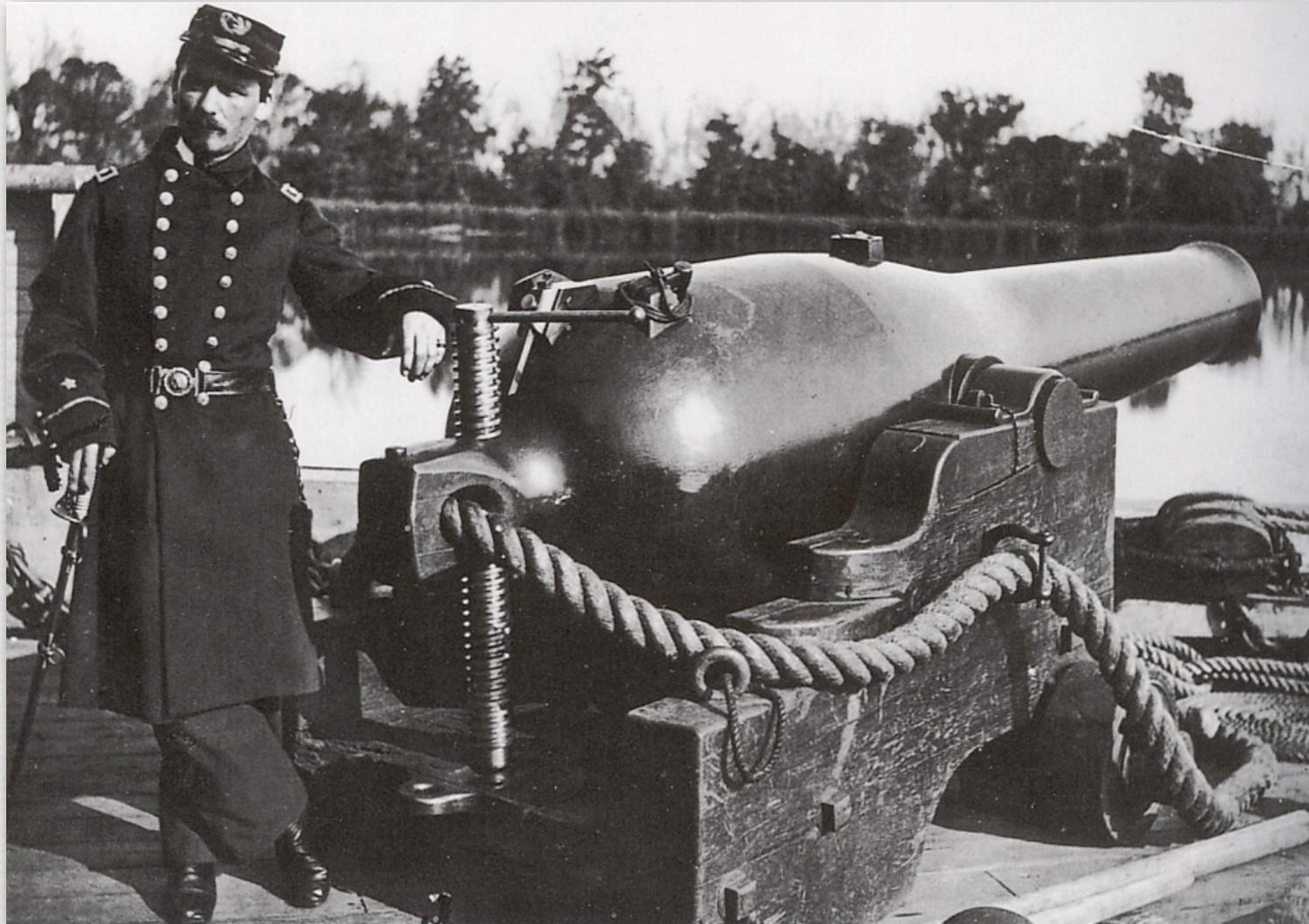


(Garrison)

Camp life

# Matthew Brady and the Civil War

---



(Garrison)

Artillery

# Matthew Brady and the Civil War

---



(Garrison)

Fortifications

# Matthew Brady and the Civil War

---

(archives.gov)



Lincoln visiting Antietam, 1862

# Matthew Brady and the Civil War

---

(Garrison)



- bloodiest battle in American history (23,000 casualties)
- this photograph was probably posed

Dead at Antietam, 1862

(photograph by Alexander Gardner)

# Matthew Brady and the Civil War

---

(Garrison)



The Ruins of Charleston, South Carolina, 1865

# Matthew Brady and the Civil War

---



General William Tecumseh Sherman, 1865

# Surveying the West

---



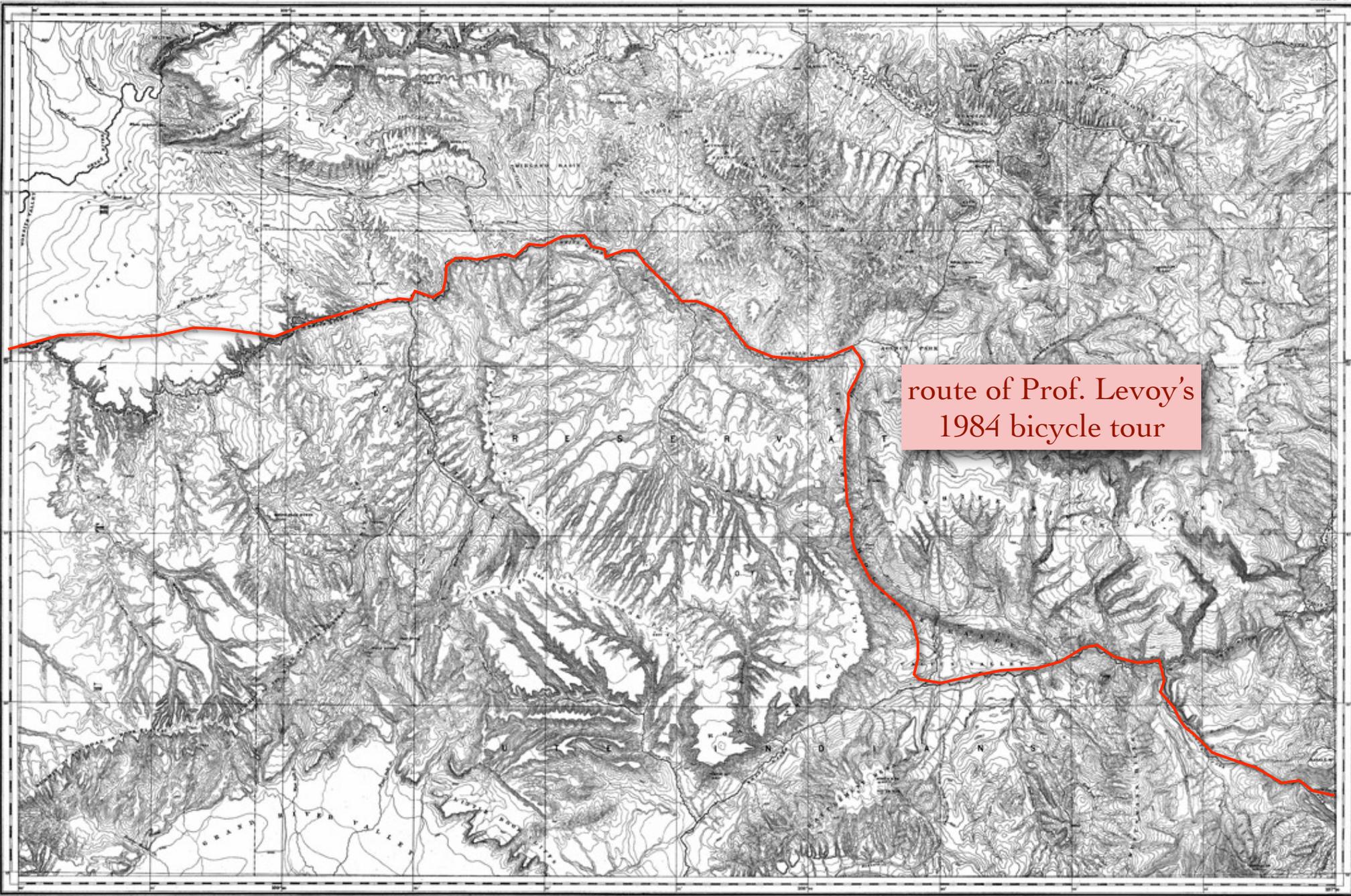
(Rosenblum)

The Hayden Survey, 1870

(photographed by William Henry Jackson)

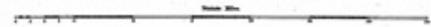
NORTH-WESTERN COLORADO AND PART OF UTAH.

SURVEYED IN 1874 & 76.



route of Prof. Levoy's 1984 bicycle tour

U.S. Ladd, G.R. Becker, E. Conrad and C.E. Chubbuck, Topographical Section.



Scale 4 miles to 1 inch at 2500 feet. Contours 100 feet interval.

Hayden Survey map of Colorado and Utah, 1874

(USGS)

# The founding of Yellowstone Park

---



(NPS)

Grand Canyon of the Yellowstone, 1871

(photographed by William Henry Jackson)

# The founding of Yellowstone Park

---



(NPS)

Grand Canyon of the Yellowstone, 1872

(watercolor by Thomas Moran)

# Slide credits

---

- ◆ Newhall, B., *The History of Photography*, Little, Brown & Co., 1982.
- ◆ Rosenblum, N., *A World History of Photography* (4th ed.), Abbeville Press, 2007.
- ◆ Garrison, W., *Brady's Civil War*, The Lyons Press, 2000.
- ◆ Tanser and Kleiner, *Gardner's Art Through the Ages* (10th ed.), Harcourt Brace, 1996.