

# Important Data

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Access syllabus: [www.uturn.org/syllabi.htm](http://www.uturn.org/syllabi.htm) (scroll to course and click on course name); click on “slides” to view current week’s visual material.

Access ANY slide lecture: [www.uturn.org/19lect1.pdf](http://www.uturn.org/19lect1.pdf)  
/19lect2.pdf, etc.

or

/20lect1.pdf  
/20lect2.pdf, etc.

up to lecture # 12 for either 19th century photo history or 20th century photo history.

Slides are also available by downloading 19th or 20th century foto folder (with files) off Hugunin’s flash drive.

## **Optional 19th Century Photo Term Paper**

Photography and Research in Austria –  
Vienna, the Door to the European East  
The proceedings of the Vienna Symposium

Go to this URL to view this text, then choose two essays to summarize:

[http://www.eshph.org/wp-content/uploads/2015/12/photography-and\\_research\\_in\\_austria2001.pdf](http://www.eshph.org/wp-content/uploads/2015/12/photography-and_research_in_austria2001.pdf)

This will replace doing the summations of two Beaumont Newhall essays.

P.S. On page 175 you will find a reference to my criticism

# **19th Century Photo: An Introduction**

Photography was invented during the industrial revolution in the 19th century. Advances in technology didn't leave artistic techniques untouched. The new age introduced new media. The industrial revolution also turned the old social order upside down. New social classes emerged, the old establishment had to deal with newcomers, a bourgeois society aiming to imitate the lifestyle of the old aristocracy. It was normal practice not only to have portraits of oneself and of all the family but also collections of the various kinds of pictures, though only very wealthy people could afford to pay painters.



## 19th Century compared to 20th Century

- 1) both "suffered" a revolution in the mode of production: industrial then, digital now.
- 2) in each case there was marked dislocation in jobs and geographical dislocation of people.
- 3) over-riding emphasis on individual entrepreneurship, an intensification of capitalism.
- 4) Fundamentalist religious revival in each case coupled to a reaction against unbelief due to science, increasing crimes rates, break down of traditional values.
- 5) both set up hero-worship (Sir Walter Scott's Knights of the Round Table then, Ronald Reagan and Cowboys now).
- 6) both took a nostalgic retreat: Middle Ages for the 19th C., the West for us now.
- 7) both felt a lessening of the power of the individual in the face of a mass society, hence the hero-worship.
- 8) in art both employed intertextuality (a photo might refer back to a poem or other text, set up tableaux, photo mimicked painting).
- 9) each period intensified surveillance technologies.

# Brief Sketch of Social Context

- 1) 1789 -- French Revolution
- 2) 1795 -- Napoleon commands Army
- 3) 1804 -- Napoleon made Emperor
- 4) 1793 - 1815 -- England at war with France
- 5) 1815 -- at time of Waterloo, George IV is King of England, conservative Tories in power.
- 6) 1817 - 1819 -- repressive legislation in England aimed at stemming lower class revolt.
- 7) 1827 - 1837 -- a variety of reform bills make life easier of lower classes.
- 8) 1830 -- Liberal Whigs come to power and make England more democratic.

As the second wave of the industrial revolution swept across Europe and America, new discoveries and theories were emerging that promised to revolutionize the conception of the origin of life and the nature of the human mind. No secret seemed beyond humanity's grasp.

Yet alongside the advancing tide of reason—and sometimes deeply intermingled with it—there was a commensurate surge of interest in all things spiritual, mystical, and occult. Whether this renewed fascination represented a reaction against rationalism, or whether it proceeded from a belief that the mysteries of existence would soon yield to the tools of reason is open to debate. A claim could be made, however, that the imaginative advances of the physical sciences had left mankind in a reduced, contingent position.

No

longer the center of the universe, humanity was suddenly confronted with the image of itself as the product of a mindless and ongoing evolutionary process, creeping along on a minor planet in a vast and uncaring cosmos, with possibly no Creator in sight.

Beneath the certainties espoused by the rationalists, a deepening unease about mankind's newly diminished status could be seen in the development of the Romantic movement.

# Key Ideologies of the Time

- 1) **Positivism** -- August Comte in France; his writings introduced into England by George Henry Lewis and J. S. Mill (1840s) which was a scientific materialism. It attacked religion as superstition.
- 2) **Non-Conformism** -- John Wesley, Methodist Fundamental Christianity.
- 3) **Socialism** -- Robert Owen and Karl Marx in England; Pierre-Joseph Proudon in France.
- 4) **Anarchism** -- Count Kropotkin; terrorism bent on overthrow of various governments.
- 5) **Fourierism** -- Charles Fourier in France, a cross between anarchism and socialism proper; an extreme Utopianism.

# Comte's Positivism

Sees natural laws in society akin to those in physics; founds Sociology (calling it "social physics"). Sees our intellectual progress as ascending toward positive science:

positive science -- all "supernatural" phenomena can be explained by material laws.

metaphysics -- observation subordinate to philosophical imagination.

theology -- phenomena explained by presence of supernatural agency.

*The scientists were saying that by science Man was learning more and more about himself as an organism, and more and more about the world as an environment, and that accordingly the environment could be changed and man made to feel more and more at home.*

# Major Figures of the Day

**Jeremy Bentham, John Stuart Mill,  
Thomas Carlyle, William Morris,  
Thomas Macaulay in England.**

**Charles Fourier, August Comte,  
P.-J. Proudhon, Napoleon III,  
Charles Baudelaire, Francois Arago  
in France.**



" . . . in the first quarter of the nineteenth century it was becoming increasingly clear that what was politically, socially, intellectually, and spiritually a new society was growing up in England for which neither the institutions, or the ideas, that had been inherited from the eighteenth century would suffice."

" . . . in terms not of high food prices, unemployment and misery but of 'deluded people,' driven astray by malicious and treacherous agitators; and inflammatory press, seizing on every grievance; underground conspiracies, bound together by secret oaths, intimidation and crime; and wolly-minded supporters in high places, bewitched by the March of Mind and the advance of 'liberal principles.' "

"Wordly power must pass from the hands of the stationery part of mankind [the aristocracy] into those of the progressive part. There must be a moral and social revolution, which shall, indeed, take away no men's lives or property, but wick shall leave to no man one fraction of unearned distinction or unearned importance."

"... the Creation of a World is little more mysterious than the cooking of a dumpling."

"Call ye that a Society . . . where there is no longer any Social Idea extant; not so much as the Idea of a common Home, but only a common over-crowded Lodging-house? Where each, isolated, regardless of his neighbour, turned against his neighbour, clutches what he can get, and cries 'Mine!' and calls it Peace, because, in the cut-purse and cut-throat Scramble, no steel knives, but only a far cunninger sort, can be employed. Where Friendship, Communion, has become an incredible tradition; and your holiest Sacramental Supper is a smoking Tavern Dinner, with Cook for Evangelist? . . . Guides and Governors cannot guide; but on all hands hear it passionately proclaimed: **Laissez faire**; Leave us alone of your guidance, such Light is darker than darkness; eat you your wages, and sleep!"

The first shock of a great earthquake had, just at that period, rent the whole neighbourhood to its centre. Traces of its course were visible on every side. . . . Everywhere were bridges that led nowhere; thoroughfares that were wholly impassable; Babel towers of chimneys . . . carcasses of ragged tenements, and fragments of unfinished walls and arches, and piles of scaffolding, and wildernesses of bricks, and giant forms of cranes, and tripods straddling above nothing. There were a hundred thousand shapes and substances of incompleteness, wildly mingled out of their places, upside down, burrowing in the earth, aspiring in the air, mouldering in the water, and unintelligible as any dream. *Dombey and Sons* (1848) Charles Dickens

# Post Napoleonic France

- 1818 – France joins the Holy Alliance, which includes Russia, Austria, Germany; its goals are to stifle social change and prevent any underclass revolt; it was ineffective after 1830.**
- 1830 – France colonizes Algeria; Louis Philippe made King of France; he abolishes the Peerage, i.e., the Body of Aristocrats.**
- 1840 - 48 – corruption under Prime Minister Guizot lead to an insurrection in June 1848; it is bloodily put down; Louis abdicates and Louis Napoleon becomes President and founds The Second Empire.**
- 1852 – Louis Napoleon declared Emperor as Napoleon III.**
- 1870 – War against Prussia; France defeated.**
- 1871 – Paris Commune: Communard uprising in Paris; it is brutally put down.**
- 1877 – Third Republic founded; power now resides in Parliament and Chamber of Deputies.**

# Summary of Key Innovations

- 1769 -- Josiah Wedgwood opens pottery factory in England; Richard Arkwright invents the water-powered spinning frame.
- 1784 -- James Watt patents the steam locomotive.
- 1798 -- Eli Whitney build a factory for mass production of firearms in New Haven, CT. Pittsburgh's first steel rolling mill opens.
- 1829 -- George Stephenson perfects the steam locomotive.
- 1830 -- railroads begin to appear in U.S. and England.
- 1839 -- Photography invented.
- 1866 -- Transatlantic cable laid.
- 1869 -- Transcontinental railroad completed in U.S.
- 1876 -- Telephone invented.
- 1887 -- Internal combustion engine invented.



When, that is, did the communication of words and things become the modern medial system before our very eyes? 1839: the annus mirabilis of the network of modern matter and message transport systems (and the criteria of speed, regularity, predictability, and reproducibility). The first commercial electric telegram, in 1839, constructed by Wheatstone and Cooke for the Great Western Railway; the first Baedeker guide (to the Rhine), 1839; and the first national railway timetable (Bradshaws), in 1839; the invention of photography—and its use in guidebooks, among other things—in 1839 (by Daguerre in France; and, in 1840, Fox Talbot in England); and the first national postal system, Rowland Hill's Penny Post (based on the invention of the prepaid stamp), in Britain, in 1840. What spreads throughout the social field, what makes up the infrastructure of the modernizing social field, is the intensified self-organization of a system of self-organizing systems: what the author of an article in the *Spectator* (February 1839) entitled "Self-Operating Processes of Fine Art: The Daguerreotype" calls "self-acting machines of mechanical operation."

# Two Basic Processes:

**Daguerreotype (metal substrate)  
invented by J. L. M. Daguerre**

**Calotype (paper substrate)  
invented by William Henry Fox-Talbot**

# Other Processes

Collodion wet plate

Ambrotype

Tintype

Cyanotype

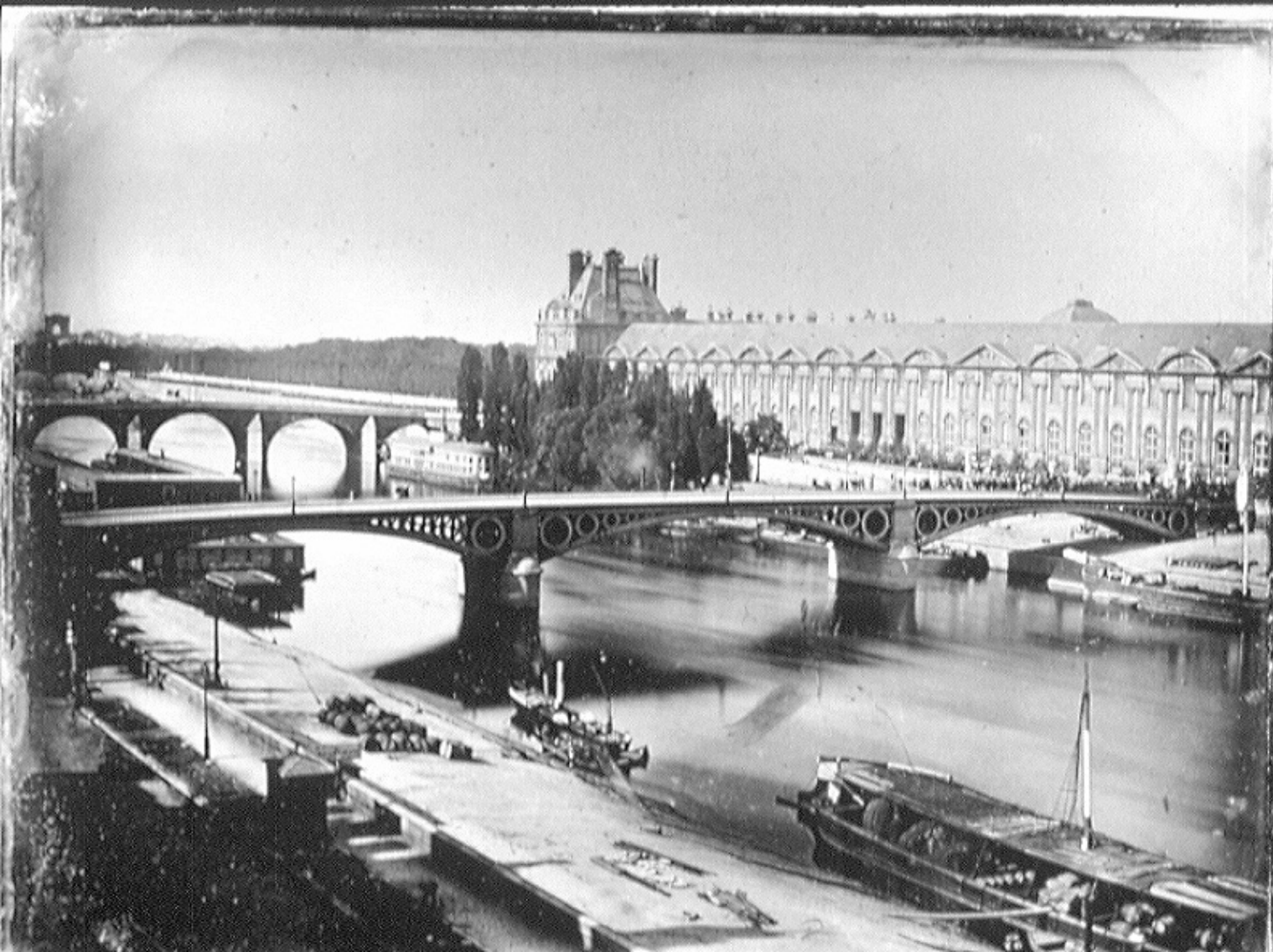
Bromoil

Platinum print

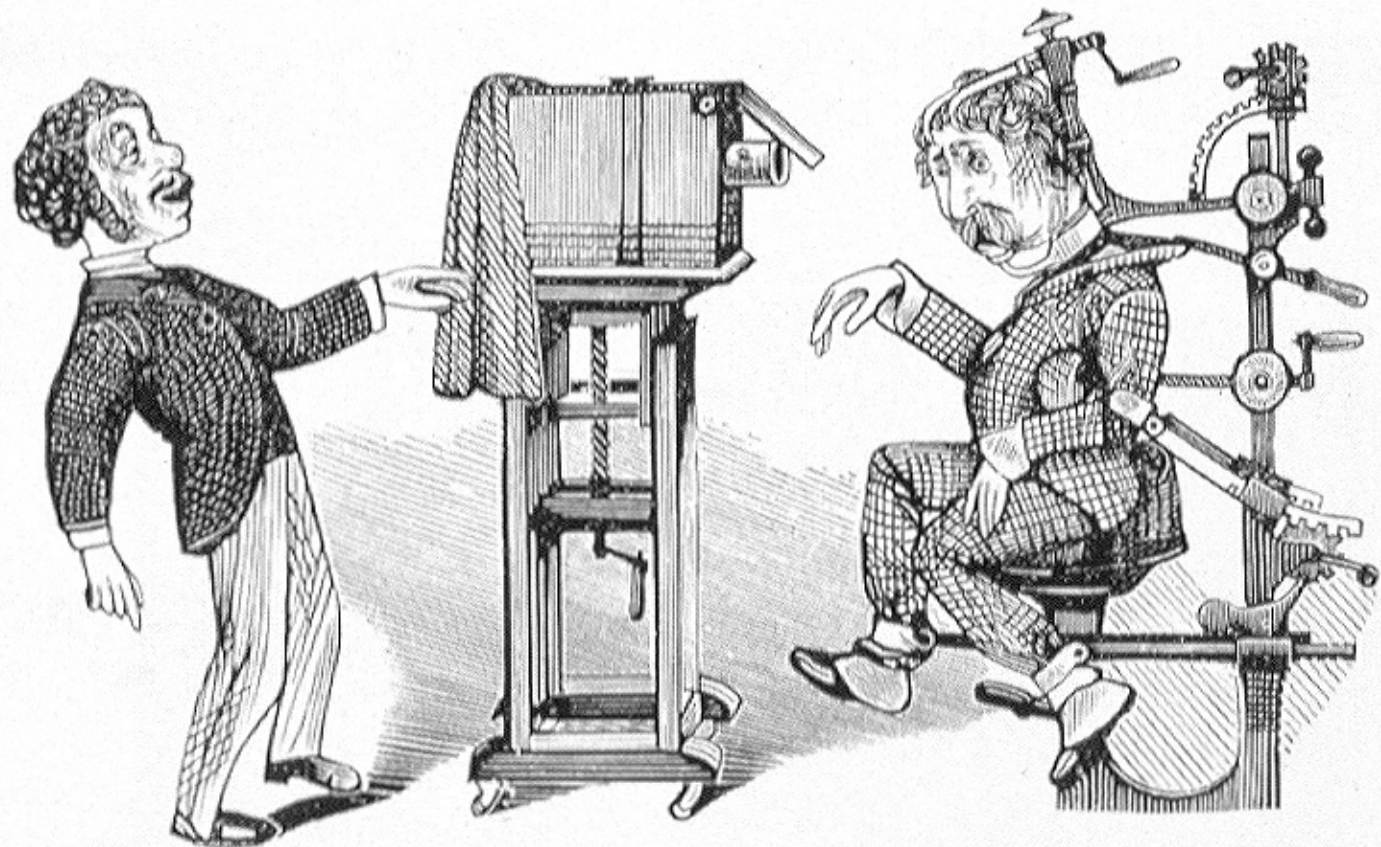
Gum bichromate

Photo gravure

Woodburytype







POSING QUITE AN ART IN ITSELF.!



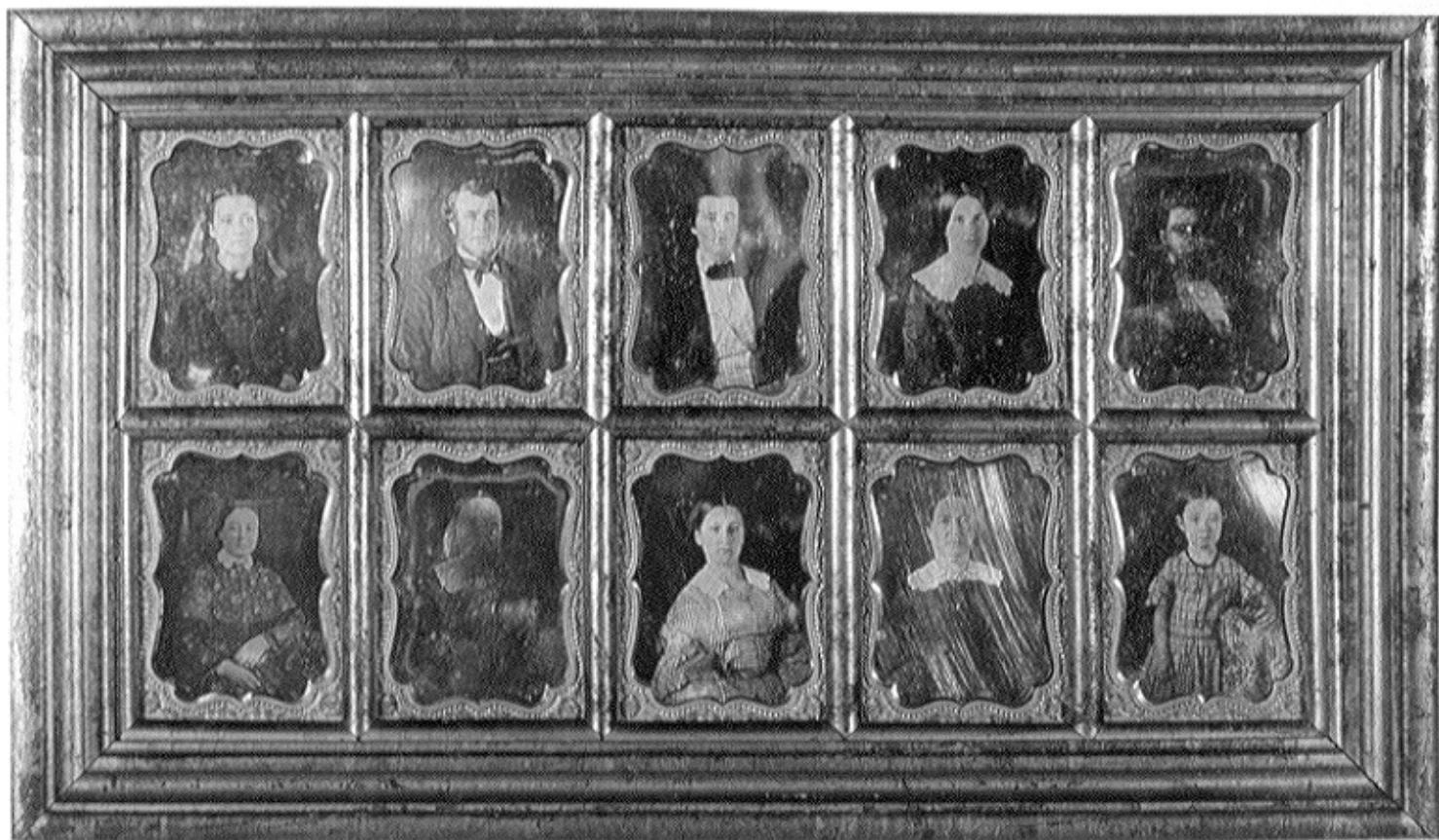
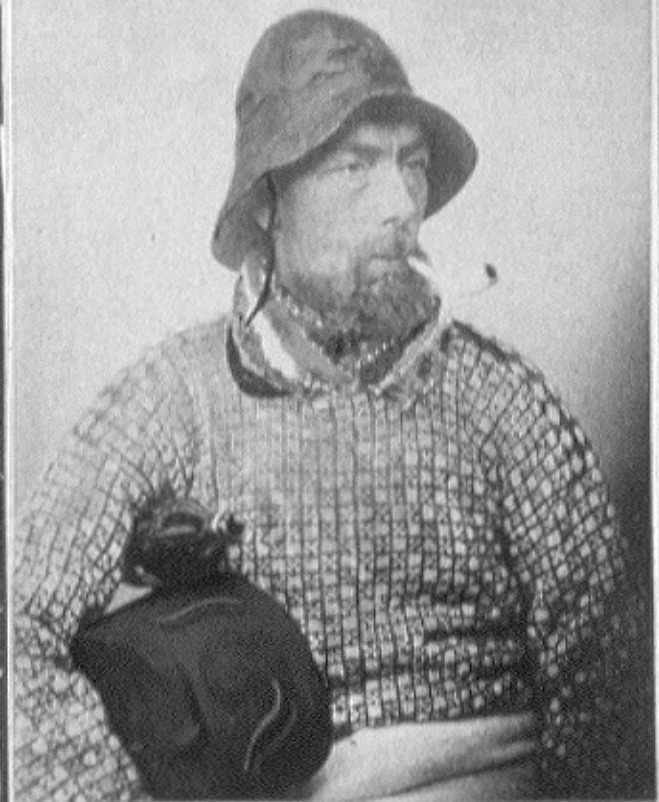


FIG. 8-1. Professional Display, 1857. American. Ten quarter-plate daguerreotype portraits in one original gilded frame. Each is dated on the back and inscribed with the client's name. Frame  $12 \times 20\frac{1}{2}$  inches.



*Peter. Angell* BERGEN.  
ENERET



*Peter. Angell* BERGEN.  
ENERET







FIG. 13-26. "Le Photographe à la Caserne," by Eugène Chaperon. 1899. The painting was shown at the Paris Salon of that year and was reproduced in *Le Panorama: Salon 1899*, edited by Ludovic Boschet, published by Hebdomadaire Librairie d'Art, Paris, and also 1 McLean's Building, New Street Square, London.

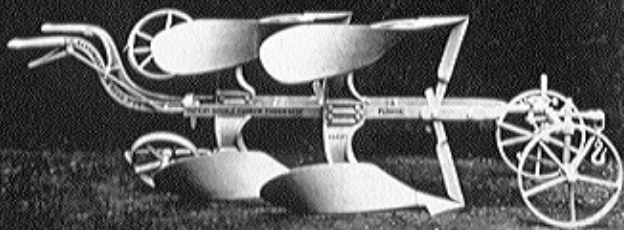


FIG. 9-13. Stereo card issued by the Keystone Company of Meadville, Pennsylvania. 1890s. Inscription on the back: "The picture on the reverse side of this card, which shows the feet entirely too large relative to the head, finally disproves the oft-repeated statement that the camera does not lie. When seen in the stereoscope, however, the feet are seen in their proper proportion. This proves that it is only the stereoscopic camera that can be relied upon for final accuracy."

1196. (Superseded by 524.)



R. S. D. D. plough with cultivator lifted  
1197. ✓



R. L. C. D. I. plough



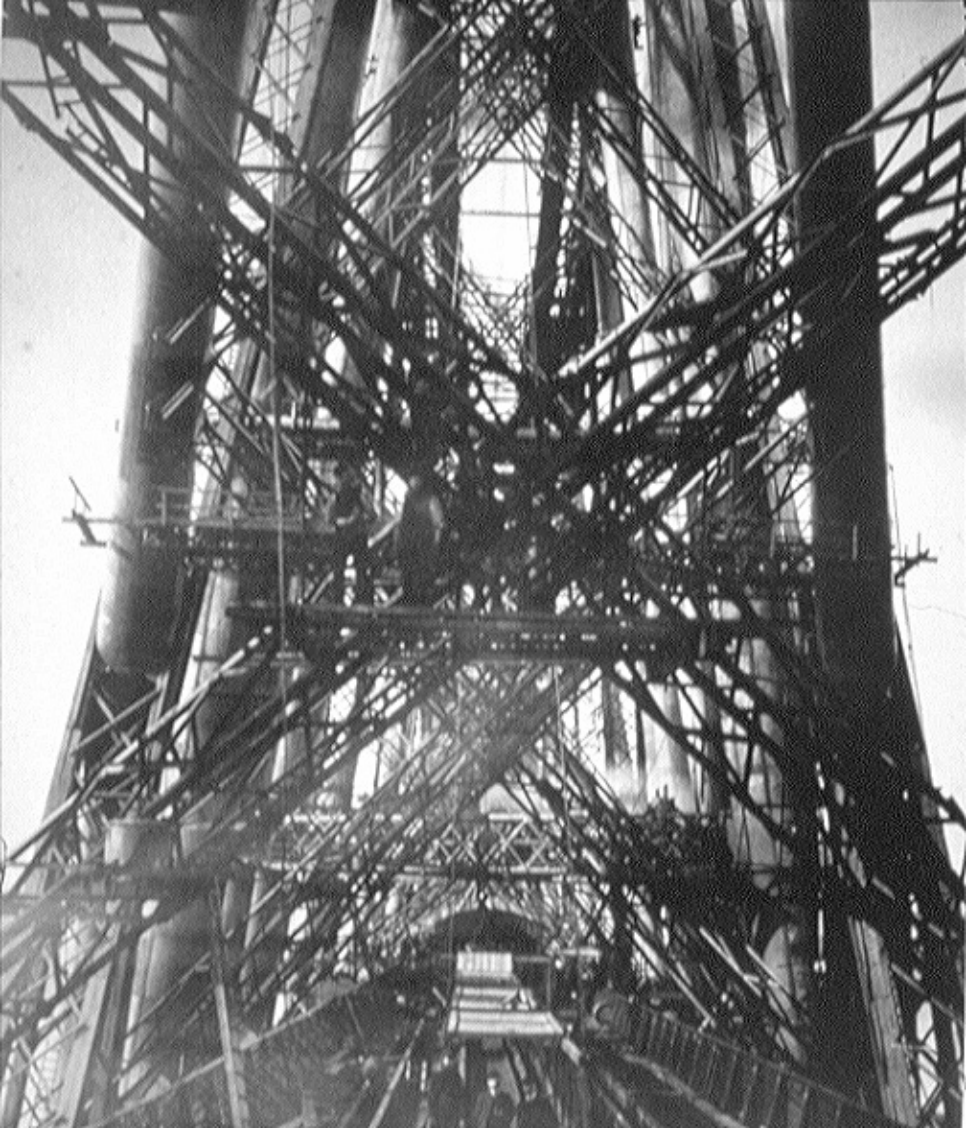


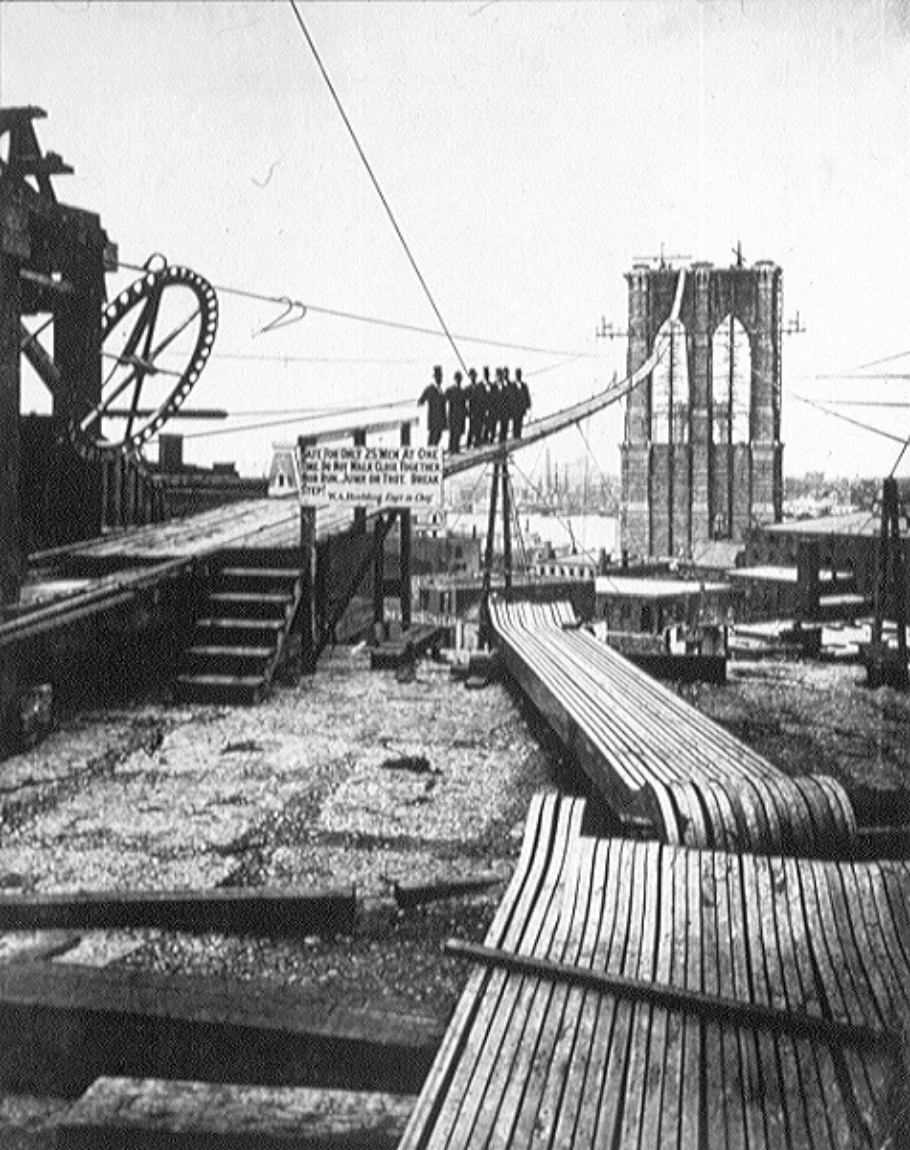








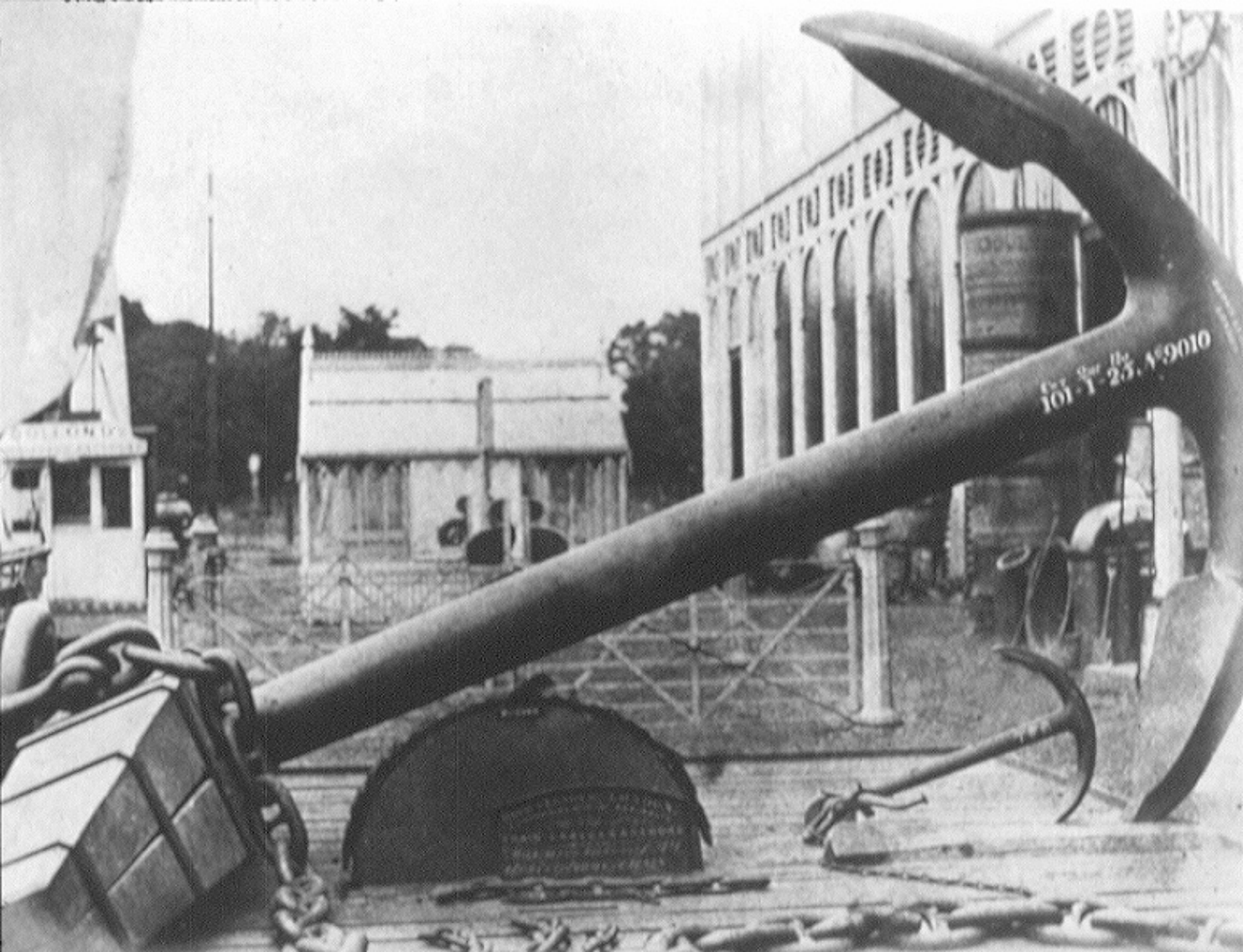




SAFE FOR ONLY 25 MEN AT ONE  
TIME DO NOT WALK CLOSE TOGETHER  
AND DON'T JUMP OR TRY TO BREAK  
STEPS W.A. Building Dept in Charge







U.S. Navy No. 101-1-25, 489010





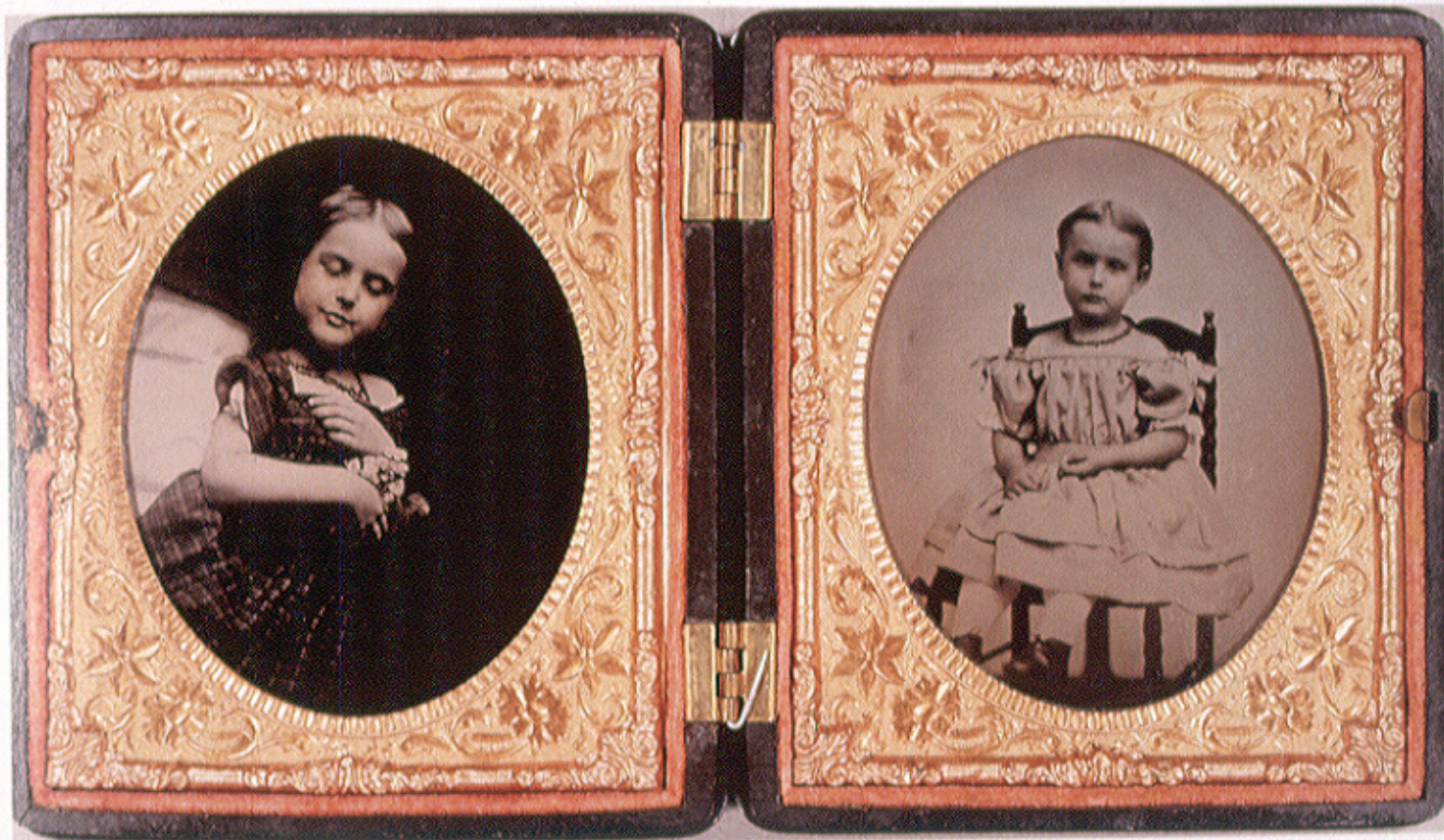


FIG. 6-15. Pre- and postmortem photographs. Unusual double portrait of a child alive and dead. Late 1850s. American. Unknown photographer. Ambrotype, ruby glass. Sixth-plate. Photographs mounted in a union case by Holmes, Booth & Hayden, a firm active in New York City from about 1857 on. (Ruby 1984)







Duchenne de Boulogne was a physician who learned photography in order to document his experimental application of electric shocks to patients' faces. With these pictures he tried to prove that facial expression is not individual but a universal abstraction of emotion, unencumbered by personality. Charles Darwin used these photographs to support his own study of the biological purpose of expressions and their original, pre-cultural meanings in man and animals.





Part of Chronograph beating hundredths of seconds

- 3 1/2  
- 16 3/4  
65 - 29 1/4  
89 1/2 - 4 1/2  
1 1/8 - 5 1/2  
5 1/4 - 6 7/8  
77 1/8 - 80  
70 - 92 1/4  
02 1/2 - 10 1/2

Scale is Horizontal line with marks 1 ft apart immediately above the figure. Vertical line behind.

Average Interval between Exposures 1.276 sec  
Opening in slit .50  
2 openings in slit also  
1.276 x 34  
43.384

Intervals between exposures

0 seconds  
12.71  
12.61  
12.92  
12.63  
12.79  
12.46  
12.87  
12.50



4 exposures. Whole exposure of lens each time .0055 sec  
Exposure of whole lens " " .00247 "  
Equivalent Exposure " " .0014 "

University of Pennsylvania.

