American Art

HISTORY AND CULTURE

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CHAPTER SEVENTEEN

PHOTOGRAPHY:

THE EARLY YEARS, 1839–70

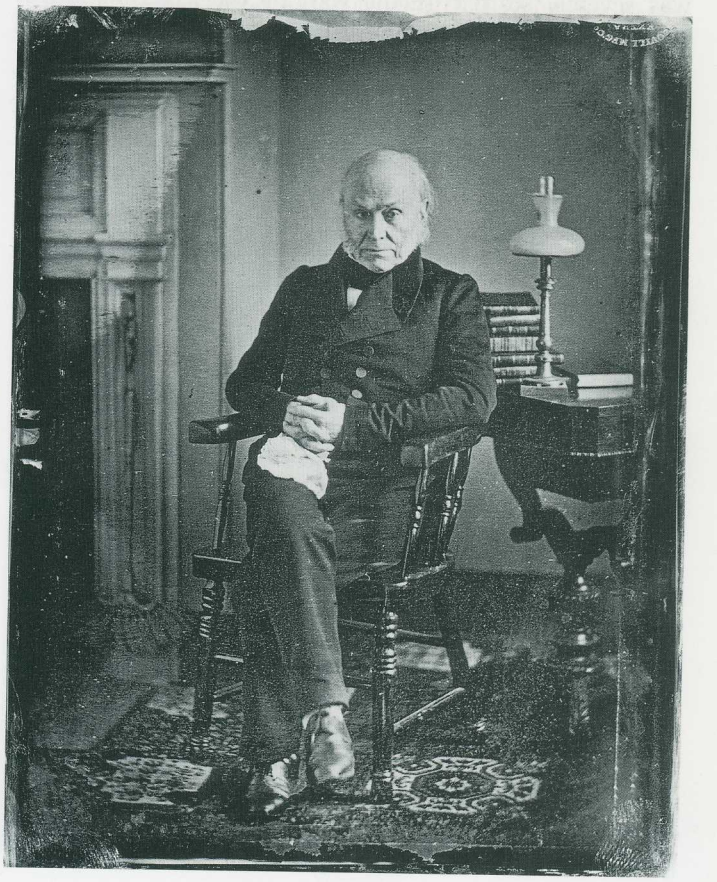
Living in the late twentieth century, a world with few or no images is difficult for us to imagine. We are constantly exposed to pictures in books, magazines, and newspapers, on television and billboards, and on the walls of our homes and workplaces. At the beginning of the nineteenth century, however, the ordinary person encountered visual images infrequently. The first revolution in this matter came with lithography, introduced into America around 1810–20, which made cheap, massproduced pictures available to a wide range of the public. The next revolution came with the introduction of the photographic process in 1839. As a new medium that was unrestricted by the restraints of tradition, it provided the public with graphic images of burning issues, great events, and humble lives. Cameramen innovatively turned their lenses upon innumerable new themes from the American panorama that painters had not deigned to consider. When the camera did vie with painting in subjects such as portraiture or landscape, it forced a reconsideration of the aesthetics of those artforms.

From its first appearance, photography began to document the unfolding saga of nineteenth-century America, sometimes heroic, sometimes tragic. Slavery and the Civil War, for example, were issues generally ignored by painters, but which were chronicled by the photographer. During this era, the nation was divided within itself over the matter of states' rights, particularly the right of each state to decide on the legality of slavery. This was especially crucial as territories joined the Union—Missouri, Texas, Kansas, Nebraska, and California, for example—and the question was hotly debated whether these new states should decide for themselves, or whether it was to be determined by the United States Congress.

New England had long been a center for the anti-slavery movement, and activities increased in the 1830s with the formation of the New England Anti-Slavery Society, in which William Lloyd Garrison and John Greenleaf Whittier (Fig. 18.10) were active. Tempers flared over the issue in Boston, where in 1835 a pro-slavery mob dragged Garrison through the streets. By 1836, there were over 500 abolitionist societies in the northern states. In 1838, the Underground Railroad was organized to help escaped slaves make their way to northern states and freedom. John Quincy Adams (Fig. 17.1) was a fiery abolitionist orator in the House of Representatives when his picture was taken in 1843. In the Senate, a Compromise Bill was worked out in 1850 by Henry Clay and Daniel Webster, but it postponed the Civil War for only a decade.

Harriet Beecher Stowe's *Uncle Tom's Cabin* (1852) fanned the flames of anti-slavery sentiments. Frederick Douglass, a former slave who escaped to the North in 1838, published *My Bondage and My Freedom* in 1854. Two years later, the fanatical and militant abolitionist John Brown led an attack on Lawrence, Kansas, which had been established by the

17.1 Philip Haas, *John Quincy Adams*, 1843. Daguerreotype. Metropolitan Museum of Art, New York City.



New England Emigrant Aid Society to promote the free-state movement in "bleeding Kansas," as it was called. When pro-slavery forces moved in, Brown began his raids. He was caught and hanged in 1859. Julia Ward Howe's "Battle Hymn of the Republic" appeared in 1861 in the *Atlantic Monthly*. Two months later, General P. T. Beauregard fired his cannon on a federal fort in the harbor at Charleston, South Carolina. The Civil War had begun.

For four long, bloody years the Blue and the Gray fought at places such as Manassas or Bull Run, Shilo, Vicksburg, and Antietam (Fig. 17.10). From the first to the third of July, 1863, a battle raged at Gettysburg—when it was over, the war turned in favor of the Union. More than 7000 men lay dead upon the rockstrewn fields, and another 34,000 were wounded. President Abraham Lincoln (Fig. 17.9) issued the Emancipation Proclamation on 1 January 1863, freeing all slaves (Fig. 18.12). On 19 November he dedicated the battlefield at Gettysburg as a national shrine with the immortal words of his Gettysburg Address. On 9 April 1865, General Robert E. Lee met General Ulysses S. Grant at Appomattox Courthouse, Virginia, and surrendered. Within a week, John Wilkes Booth had assassinated President Lincoln at Ford's Theater in Washington.

The Union had lost its spiritual as well as its political leader—the South had lost everything, and was devastated. The period of Reconstruction, a decade of anguish, followed, but it was a long time before recovery really came to the southern states. A profound pall hung over a nation that was severely scarred by the war, by the assassination of Lincoln, and by the corruption of the postwar era. Prewar optimism and the American Dream were crushed. In order to escape and start anew in yet another Eden, Americans turned west.

If the South was devastated, the North emerged from the Civil War stronger than ever in industrial might and financial power. The foundations for the great fortunes of late-nineteenth-century America were laid solidly in place.

ORIGINS OF PHOTOGRAPHY: THE DAGUERREOTYPE

Americans loved mechanical gadgets, and once the camera was introduced, within three decades—from 1839 to 1870—the popularity of the photographic image was immense. Soon every town and hamlet across the land was familiar with the new picturemaking process.

The story of photography begins in Europe. Early experiments in light-sensitive images had been conducted in France by the chemist Joseph Nicéphore Niépce. When he died in 1833, Niépce's process was taken up and perfected by his fellow-countryman Louis Jacques Mandé Daguerre (1789–1851).

Daguerre's procedure involved coating a copper plate with a light-sensitive emulsion, which, when exposed to light, produced an image on the plate. As there was no negative, the image was unique and could not be duplicated. Daguerre's work marks the beginning of photography. In August 1839 he made his process public knowledge, and word of it spread far and wide.

Meanwhile, an Englishman named William Henry Fox Talbot had developed a method that employed a negative, from which any number of positive prints could be made on light-sensitive paper. Talbot, however, was fiercely protective of his process, patenting it, and only releasing it through franchises which he sold. Pictures made using Daguerre's procedure are known as daguerreotypes, those produced from Talbot's method are **talbotypes** or **calotypes**.

A few months before Daguerre announced his process publicly, accounts of it appeared in a number of American newspapers. By October of that year a Philadelphian, Joseph Saxon, produced what is believed to be the first daguerreotype in America. Robert Cornelius (1809–93), a manufacturer of metal lamps in the Quaker City, was also one of the first to produce daguerreotypes, operating a studio from 1839 to 1842. His partner, Dr. Paul Beck Goddard, a chemistry professor at the University of Pennsylvania, discovered bromine, which speeded up the exposure time sufficiently to make posing for a portrait possible. Philadelphia's credentials as an early center of photography were further established by the exhibitions of daguerreotypes held at the Franklin Institute and the American Philosophical Society in late 1839 and 1840.

PERSONALIZED PICTURES FOR ALL

In New York City, the former painter Samuel F. B. Morse was influential in the introduction and dissemination of the daguerreotype process. Morse had been in Paris in 1839 and knew Daguerre. When he returned to America that year, he began advocating the use of the camera by artists—as president of the National Academy of Design, he was in a good position to do so.

The necessary equipment was at first bulky, but it was uncomplicated. The original camera was an unsophisticated affair, little more than a wooden box with a lens at one end and a sensitized plate at the other. The process required some mechanical aptitude and a little knowledge of chemistry, but no artistic talent whatsoever. This in itself effected a revolution in picturemaking. Suddenly anyone could produce images. By 1853, there were reportedly 2000 daguerreotypists practicing in America, most of whom were in the business to make money, not art. Although the early daguerreotypes had a relatively low aesthetic threshhold, there were many powerful images among them showing perceptive observation and great exactitude in every detail.

The daguerreotype was the most democratic form of imagemaking ever known, bringing personalized pictures within the reach of the common person. It was estimated

that by 1853, three million Americans, out of a total population of about twenty-five million, were having their portraits taken annually with the new invention. The daguerreotype was inexpensive and affordable to the masses. While ordinary people might be able to purchase an engraving, previously they could not afford to commission something so personal as a portrait. Now they could, and every city and town soon had its own photographer and studio. Itinerant daguerreotypists carried their darkrooms with them in their horsedrawn buggies. There were even some who had their studios on flatboats so they could do business at all the river towns.

VISUAL REALISM

The early daguerreotypists came into contact with and recorded images of people and their lifestyles that had seldom attracted the attention of painters—again, the democratization of picturemaking is evident. The camera produced a visual realism such as had never been known. For this reason, Europeans disliked the photographic image as a substitute for art—but Americans loved it, both for the mechanical wizardry it involved, and for the factual character of the image.

Because the process offered less opportunity for the intrusion of the artist, the daguerreotype became synonymous with truthfulness. Nothing could be added, changed, or left out, and this was admired greatly as the ultimate truth in imagery. The fascination with truthfulness soon outweighed a concern for aesthetic refinement. As one man remarked upon seeing a daguerreotype portrait of himself: "An ugly little thing, and a capital likeness." Edgar Allan Poe admired the daguerreotype because it was infinitely more accurate than anything painted by hand. In Nathaniel Hawthorne's *The House of Seven Gables* (1851), Holgrave the daguerreotypist delves into the psyche of others, with the declaration that the camera reveals the inner, often darker conditions of the soul: The daguerreotype "brings out the secret character with a truth that no painter would venture upon, even could he detect it."

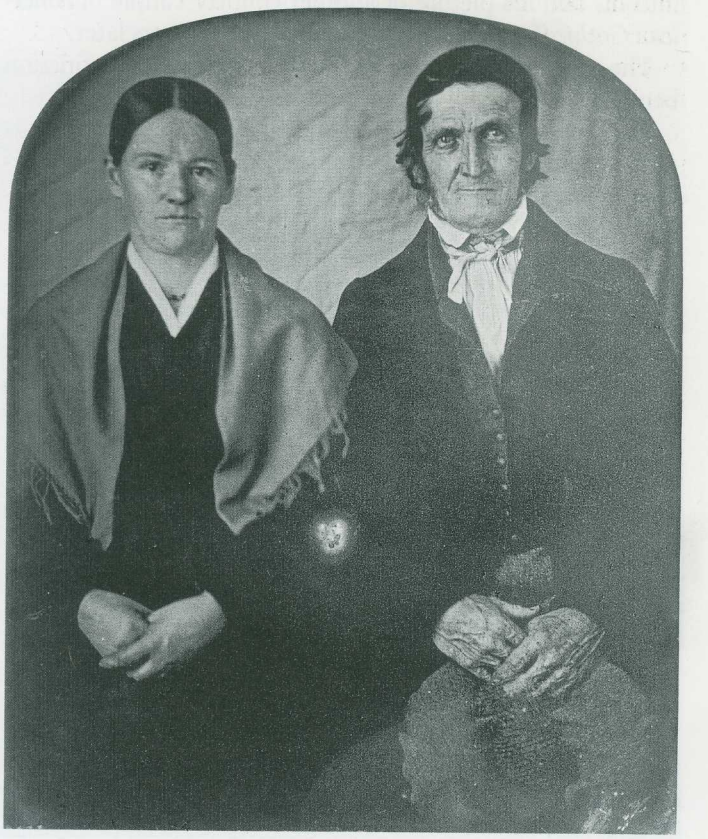
PORTRAITURE: REALISM AT EVERY LEVEL

In this early period, the portrait was the most popular of photographic images, although genre subjects, city views, and landscapes were photographed as well. Attempts at allegory, moral tableaux, and religious subjects were not successful because the photograph was too blatantly realistic for their idealizing content. The forthright realism of the daguerreotype was acceptable for portraiture at all levels of American society. John Quincy Adams, for example, although mystified by the process, posed frequently. The full-length portrait of him by Philip Haas (Fig. 17.1) is very different from Thomas Sully's elegant and idealized portrait of the wealthy Bostonian Thomas Handasyd Perkins (Fig. 10.12)—yet only a decade separates the two. Haas (active 1840–60), one of the early daguerreotypists, operated a studio in Washington, D.C. Adams posed for him there on at least one occasion on behalf of an artist, James Reid Lambdin, who wished to use the picture as an aid when he painted Adams's portrait. While Adams appreciated the realism with which his features were preserved by the daguerreotype, he lamented to his diary, on 2 August 1843, that the images were "too true to the original."

THE UNERRING EYE

Of all the forms of painting, portraiture was the most affected by the daguerreotype. The unerring eye of the camera gave the ordinary American, who was unsophisticated in matters of aesthetics and the fine arts, that truthfulness which he or she respected in an image. The *Country Couple* (Fig. 17.2), for example, has a naturalness and almost painful plainness of face, an absence of expression or gesture, that are not in any way associated with pretension or the artistic traditions of traditional painted portraits. The people are viewed straight-on, and every detail is magically captured. It was these qualities Grant Wood incorporated

17.2 Anonymous, *Country Couple*, c. 1844. Daguerreotype. Ohio State University Library for Communication and Graphic Arts, Columbus, Ohio. Floyd and Marion Rinhart Collection.



17.3 Anonymous, *Lewis Cass*, c. 1855. Daguerreotype. Chicago Historical Society, Chicago, Illinois.

17.4 Anonymous, *The Toleware Maker*, c. 1850. Daguerreotype. International Museum of Photography, George Eastman House, Rochester, New York.

17.5 Samuel F. B. Morse, *Mrs. Samuel F. B. Morse and Daughter Playing Chess*, c. 1848. Daguerreotype. Courtesy The New-York Historical Society, New York City.

into his famous picture of another country couple in *American Gothic* (Fig. 29.20) nearly one hundred years later.

The camera was unprejudiced. It made no distinction between the common person and one who was famous, rich, or powerful. The observing lens captured the warts, bags under the eyes, and puffy, sagging flesh of the face of Lewis Cass, who in 1848—shortly before his daguerreotype was taken—was the unsuccessful democratic candidate for the presidency (Fig. 17.3). The portrait painter Rembrandt Peale observed in 1857 that "... it has become necessary for the portrait painter to make his portraits *as true* but expressly *more true* than daguerreotypes."[1] That mid-century America was already inclined to accept such forthright representation is apparent in Hiram Powers's bust of Andrew Jackson (Fig. 18.3), done two years before the daguerreotype was known in the United States.

The variety that existed within daguerreotype portraiture can be seen in *The Toleware Maker* (Fig. 17.4), a latterday companion to Copley's *Paul Revere* (Fig. 7.9). The subject wished to be represented at his trade with an assortment of the tools of his craft and several fine specimens of his britannia metalware (an alloy of tin, copper, and antimony). A workingman's pride and the American work ethic are revealed here: Britannia was the metal of the common people's tableware, just as the daguerreotype had become the natural medium for their portraits. Genre scenes of people at their work or resting from it had been painted by

William Sidney Mount in the 1830s and 1840s, but Mount's world seems idyllic, like amusing pastoral poetry in contrast to the realities of life that are apparent in this daguerreotype.

FINE ART PORTRAITS

It is natural that an artist such as Samuel F. B. Morse, a painter for over thirty years, should be concerned with the pictorial fine-art qualities of the daguerreotype. In the portrait of his wife and daughter playing chess in an outdoor setting, with a soft sunlight filtering through the airy boughs of the trees, Morse achieved delicate tonal qualities, and feathery, painterly, impressionistic effects (Fig. 17.5). Morse's daguerreotype looks ahead to Thomas Eakins, one of America's greatest artists, who used the photographic image in genre or portrait studies.

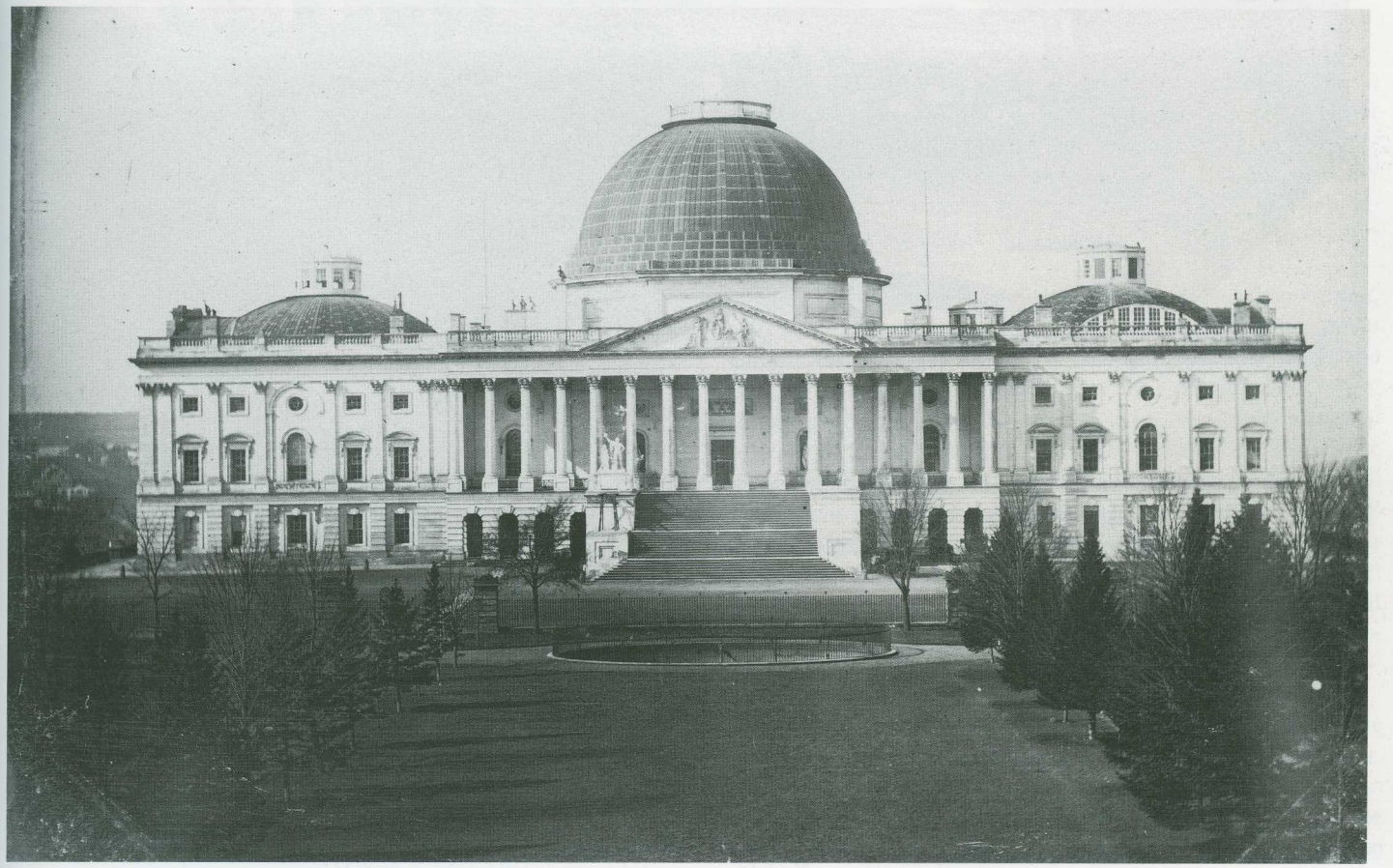
In the 1840s and 1850s, painters often tried to give their work something of the character of a daguerreotype—and daguerreotypists frequently attempted to imbue their pictures with painterly qualities. Neither knew precisely what the aesthetic dimensions of the new type of image were. For the average daguerreotypist, the best results were achieved when utilizing the bold strength of the medium, rather than trying to achieve subtle, aesthetic finesse.

DOCUMENTARY PHOTOGRAPHY

Picturesque views of famous natural landmarks, important buildings, and urban scenes quickly became popular. John Plumbe, Jr. (1809–57), operated studios and galleries in New York City, Washington, Boston, Philadelphia, and nearly every other major American city, even as far west as Dubuque, Iowa, in the 1840s. His view of the U.S. Capitol, which is seen essentially as Charles Bulfinch completed it, is the earliest photographic record of the building (Fig. 17.6). Luigi Persico's recently installed pedimental sculptures and his Discovery Group on the blocking beside the stairs can be seen. We also see that there was once a pool in front of the steps, to provide water in case of fire. Such photography is valuable as a documentary record of bygone America. John Plumbe did as much as anyone prior to the time of George Eastman to promote photography, in part through periodic publications such as *The National Plumbeotype Gallery* and the *Plumbeian*.

In Philadelphia, the foremost practitioners of the new medium were William Langenheim (1807–74) and his brother Frederick (1809–79), who had emigrated from Germany in the 1820s. By 1840, they were salesmen of

17.6 John Plumbe, Jr., *United States Capitol,* 1846. Daguerreotype.



17.7 Langenheim Brothers, *Northeast Corner of Third and Dock Streets, Philadelphia*, 1844. Daguerreotype. Library Company, Philadelphia.

European cameras, lenses, and other equipment, but within two years, they had opened their own studio in the Merchants' Exchange (Fig. 13.4). International acclaim came with a series of views of Niagara Falls, taken in 1845. While the brothers used the daguerreotype at first, they purchased exclusive American rights to the Talbot process in 1846. In the following decade they were the first in the United States to popularize **stereoscopic** views, establishing the American Stereoscopic Company. Before long, thousands of homes across the nation had equipment for showing slides or viewing the familiar double image through a handheld stereoscope or stereopticon. The insatiable demand for this form of home entertainment broadened photography's range of subject matter immensely.

An early daguerreotype by the Langenheim brothers is the view of Girard Bank (formerly First Bank of the United States, see Fig. 8.15) (Fig. 17.7). This shot is of special interest because it records one of the so-called Native American Riots, when American-born citizens were demanding that foreigners, particularly Irish immigrants, should have to live in America for twenty-one years before they were allowed to vote. It is the earliest known use of the camera as a journalistic instrument.

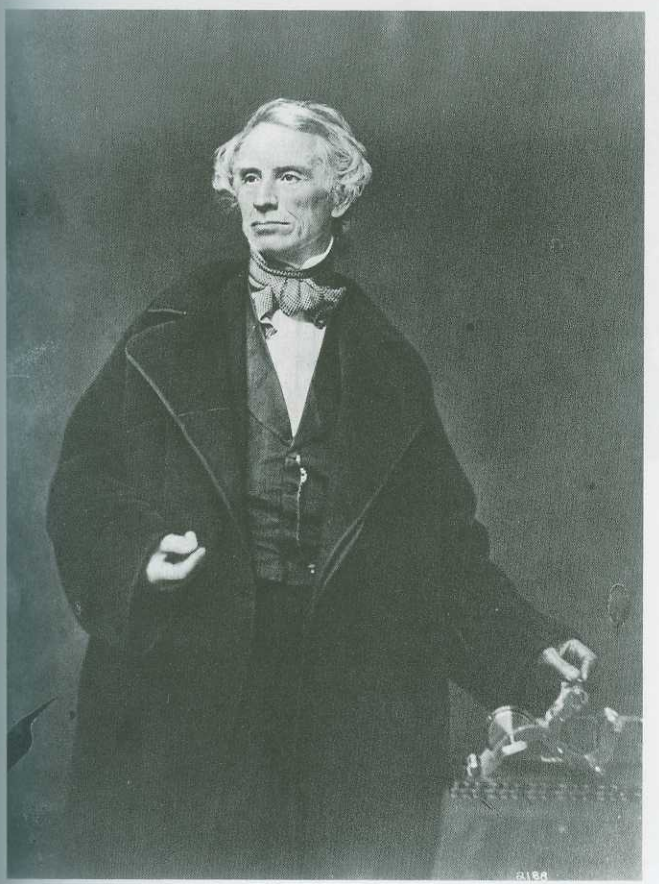
In the early 1850s, photography underwent important technical changes. The **wet plate**, or **collodion-coated plate**, replaced the daguerreotype. This simplified and less

expensive process led to ambrotypes on glass, tin types on tin, or some other thin sheet of metal, and, finally, to pictures printed on paper. The negative meant it was possible to duplicate the image *ad infinitum*. Other technical advancements made it possible for photographers to move outside their studios, and turn their lenses upon the city and the landscape.

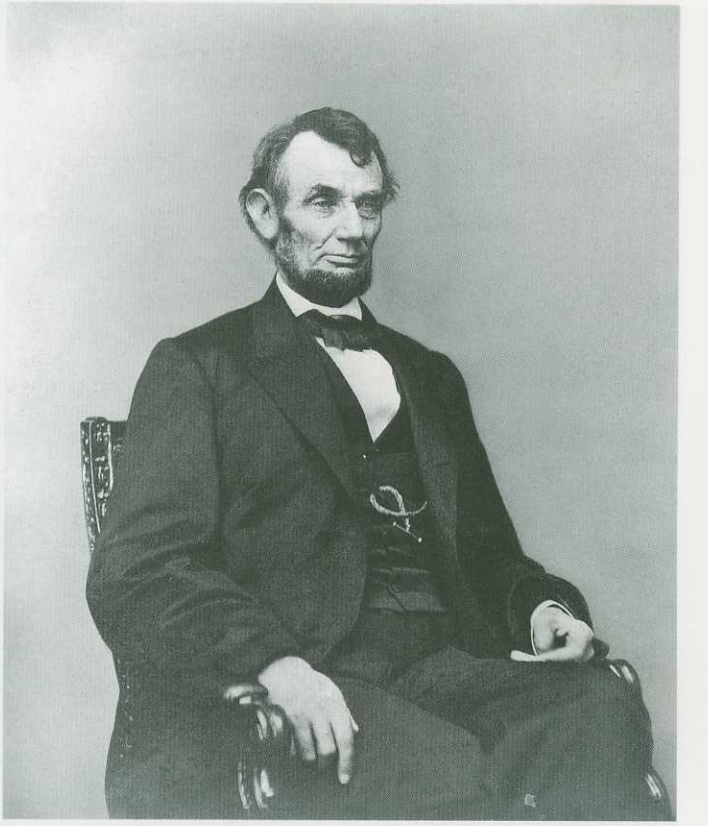
MR. LINCOLN'S CAMERAMAN

Probably the bestknown photographer of this period was Mathew B. Brady (c. 1823–96). Born in Upstate New York, Brady studied art with William Page, and then attended the National Academy of Design. When he was about twenty, he learned the daguerreotype process from Samuel F. B. Morse. By 1844 Brady had opened a studio on lower Broadway. During the next two decades, he was among the most successful photographers in America, with fashionable Manhattan society as clientele. By 1849 he had a branch studio in Washington, D.C.

Brady had a flair for the dramatic, a sensitivity to the personality of his sitter, and a feeling for mood—he made his camera work toward the desired image. *Samuel F. B. Morse*, for example, is a daguerreotype portrait of an elder statesman of the fine arts, a distinguished professor, and a celebrated inventor (Fig. 17.8). He is shown three-quarter length, as if giving a lecture-demonstration about his telegraph (lower right). On 24 May 1844, Morse successfully sent the first message over his telegraph wire from Washington, D.C., to Baltimore. Brady made his portrait soon after that momentous event.



17.8 Mathew B. Brady, *Samuel F. B. Morse*, c. 1845. Daguerreotype. Library of Congress.



17.9 Mathew B. Brady, *Abraham Lincoln*, c. 1863. Photograph. Library of Congress.

Brady is often referred to as Mr. Lincoln's Cameraman. While he photographed Lincoln many times, he never caught the essence of his subject as splendidly as in the portrait shown in Figure 17.9. Lincoln's gravity, his craggy, lined, tired face, his solemn pensiveness, and rumpled attire—all are given with the visual realism for which the photograph had become so famous. Brady, however, had achieved something more than a dull, factual, blatant realism, for here, surely, is Lincoln as subsequent generations remembered him. Lincoln's son Robert called this the best likeness of his father ever made. When an image of the great man was needed for the five-dollar bill—still in use today—this was the image that was chosen.

Brady on the Battlefield Over 300 cameramen were issued passes to enter the battle zones of the Civil War. Thus Mathew Brady was by no means the only one to photograph the conflict, although he is certainly now the bestknown. Brady employed a number of photographers to

17.10 Mathew B. Brady, *On the Antietam Battlefield*, 1862. Photograph. Library of Congress.

cover the regions in which the war was being waged. Some of these men later became wellknown in their own right—for example, Alexander Gardner, who published *Gardner's Sketch-Book of the War* (1865–6), and Timothy O'Sullivan. Brady and his teams traveled with the Union armies in their own specially outfitted, horsedrawn buggies—cumbersome vehicles loaded with glass plates, chemicals, tanks, storage boxes, and camera equipment, and a diminutive darkroom.

Because the exposure time was still so long—many seconds—it was not possible to photograph the actual battles, which, of course, were in constant motion. The record of the Civil War is therefore of the aftermath of battle. Americans had never before seen war shown so graphically. Brady himself photographed the carnage following the battle at Antietam, Maryland, on 17 September 1862, when nearly 5000 were killed and 18,000 wounded. In pictures like *On the Antietam Battlefield*, the stark, bloody, reality of war is shown in a way that painters such as Winslow Homer never captured (Fig. 17.10). The camera's lens presents the horror of war with an uncompromising realism that overwhelms any romantic or sentimental notions about its glory. As Oliver Wendell Holmes said of Brady's pictures of Antietam:

> Let him who wishes to know what war is, look at this series of illustrations.... It was so nearly like visiting the battlefield to look over these views, that all the emotions excited by the actual sight of the stained and sordid scene, strewed with rags and wrecks, came back to us, and we buried them in the recesses of our cabinet as we would have buried the mutilated remains of the dead they too vividly represented.[2]

Early attempts at photographic war journalism seared the soul of America. The nation, though ultimately emerging with the Union intact, would never be the same—the sense of innocence and optimism that it had enjoyed before the war was gone.

After the war, Brady operated his studio in Washington, D.C., turning his camera upon the American scene, and

17.11 Mathew B. Brady, *Broadway Looking North from Spring Street, New York City*, 1867. Stereograph. Courtesy The New-York Historical Society, New York City.

making portraits of the leading figures of the day. His view of New York City, *Broadway Looking North from Spring Street* is typical of the photographer's interest in city life (Fig. 17.11). Not until the rise of the Ashcan school early in the next century did painters take up these subjects. Here is an instance of a cameraman pioneering new pictorial themes in advance of the painters. The final years of Brady's career were far from happy. Bankrupt, he lost his studio, worked for a long time for other photographers, died in a charity ward in New York City, and was buried in an unmarked grave in Washington, D.C.

TO EUROPE—AND YOSEMITE

After the Civil War, wherever Americans went, the camera went along to record their activities and the sights they saw. Some went to Europe in search of culture; others went west to see the vast new territories there. In Rome, Henry Wadsworth Longfellow and his daughter Edith were photographed in the studio of the portraitist George P. A. Healy, in 1868–9 (Fig. 17.12). The print is scored for scaling to facilitate transferring the image to canvas, which Healy did in *The Arch of Titus* (1871; The Newmark Museum). The

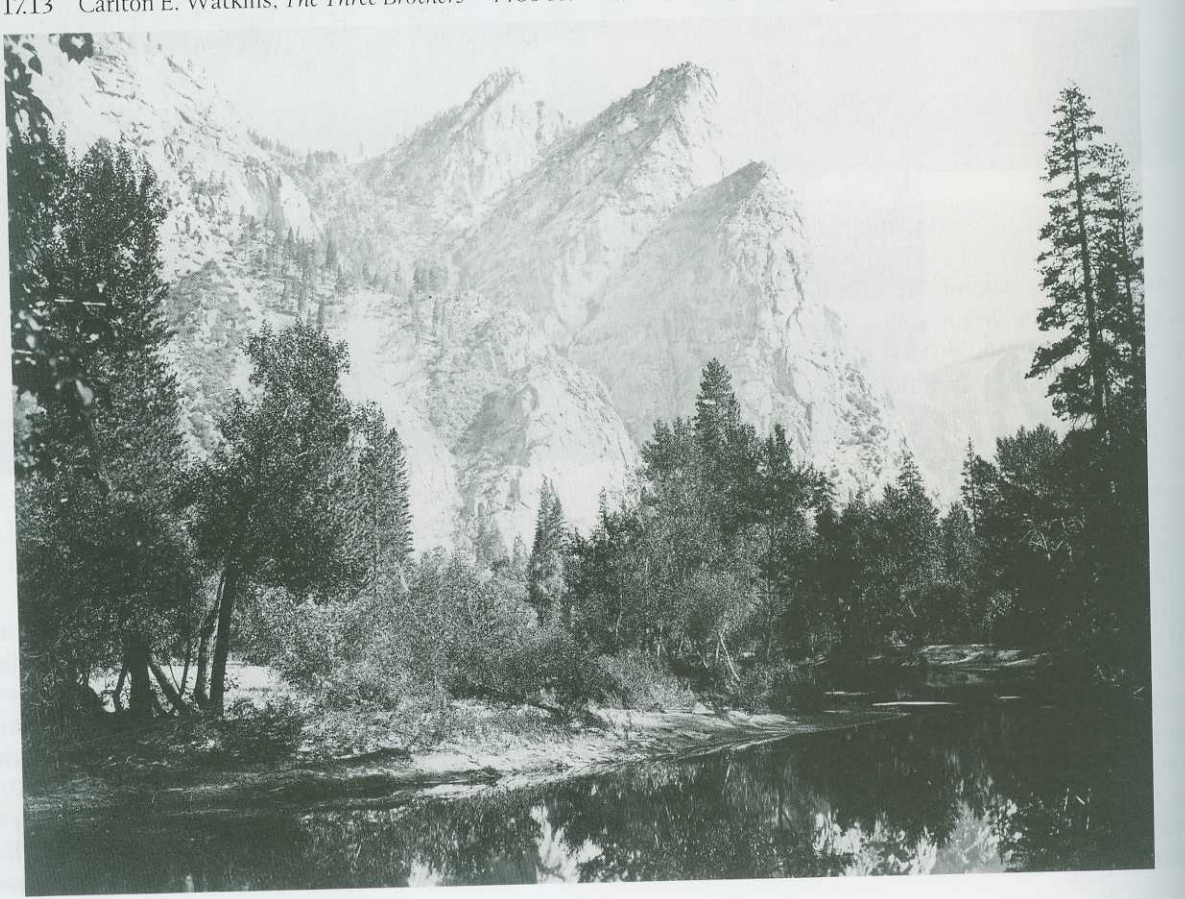
painting shows the poet and his daughter passing under the famous Roman arch, while a group of American artists in the foreground includes Frederic Church sketching as Healy and Jervis McEntee look on.

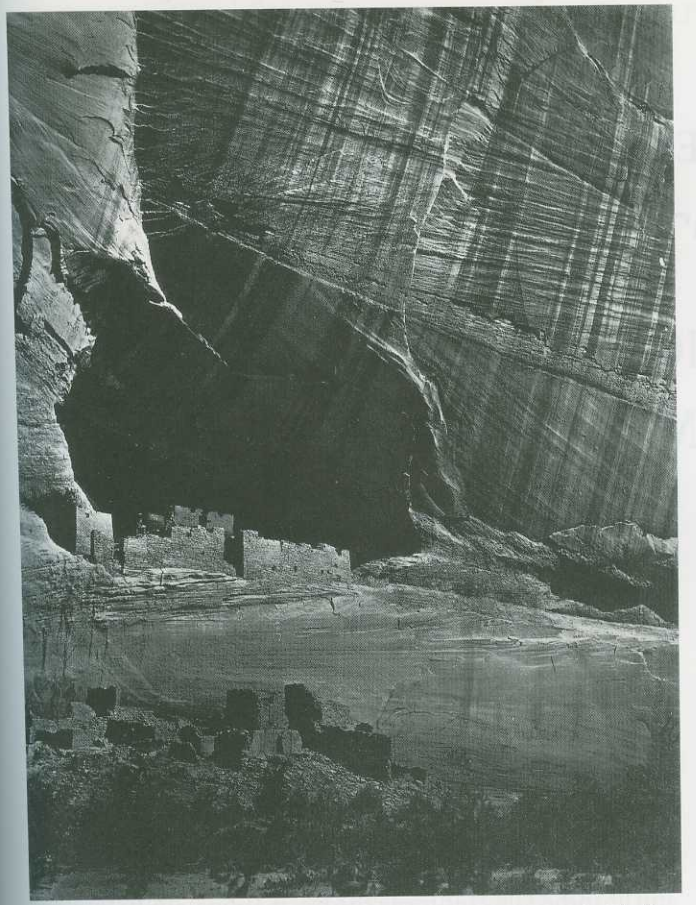
With the end of the war, many Americans sought an escape from its horrible memories in the natural beauty of the West. They sought their fortunes in the goldfields, silvermines, or, more modestly, the fertile fields of the vast prairies—in the new territories that the government opened up after Congress had finally passed a Homestead Act in 1862.

The history of photographing the West began before the war. As early as 1851 a San Francisco photographer named Robert Vance (d. 1876) offered some 300 views of California for sale. That same year, Carlton E. Watkins (1829–1916) arrived in the city by the Bay, from Oneonta, New York, and worked for Vance for a while before opening a studio and gallery in 1857. Watkins made an adventurous trip into Yosemite Valley in 1861, taking a series of large plates of its extraordinary loveliness (Fig. 17.13). The photographer signed his prints just as an artist would sign his painting. His twenty-five or so views of Yosemite, which were avidly collected by naturalists, prepared the way for the passage of a bill in Congress which was signed by President Lincoln, establishing Yosemite as a national preserve.

17.12 Anonymous, *Henry Wadsworth Longfellow and his Daughter, Edith, in G. P. A. Healy's Studio in Rome*, c. 1868–9. Photograph. Archives of American Art, Smithsonian Institution, Washington, D.C.

17.13 Carlton E. Watkins, *The Three Brothers—4480 Feet—Yosemite*, 1861. Photograph. Library of Congress.





17.14 Timothy O'Sullivan, *Ancient Ruins in the Canyon de Chelle, New Mexico*, 1873. Collodion print, 10⅞ × 8in (27.6 × 20.3cm). Collection, The Museum of Modern Art, New York. Gift of Ansel Adams in memory of Albert M. Bender.

Watkins's *Yosemite Valley* anticipates Albert Bierstadt's paintings of that and other areas in California, such as *Among the Sierra Nevada Mountains, California* (Fig. 15.16) of 1868. Bierstadt was a skilled photographer, and took hundreds of views of the mountains and valleys of the Rockies and the California ranges in 1859 and the early 1860s. He also took photographs of Native Americans who lived in these regions, some of which were later used in his paintings (Fig. 25.3).

Timothy O'Sullivan (1840–82) began his career as an assistant to Mathew Brady. He preserved some of the most memorable scenes of death and carnage on Civil War battlefields, especially of the aftermath of Gettysburg. Many of his pictures appeared in Alexander Gardner's *Sketch-Book of the War*. After the war, O'Sullivan went west in 1867 with the U.S. Geological Explorations West of the 40th Parallel, an expedition led by Clarence King. O'Sullivan left an invaluable documentation of this entire survey. In 1870 he similarly recorded the activities of the Darien Expedition through the jungles of Panama, in search of the best location for a great canal connecting the Atlantic and Pacific oceans. Next, O'Sullivan crossed the scorching sands of Death Valley, then made a tortuous trip by boat up the Colorado River.

Perhaps his most impressive work came from the Wheeler Expedition of 1873–5, which explored and charted Arizona and New Mexico. O'Sullivan had an eye for vivid contrasts, enormous scale, and the extraordinary features of the West, seen in his remarkable *Ancient Ruins in the Canyon de Chelle*, with its Cyclopean rock formations, scarred and scored by eons of dynamic geological violence, that totally dwarf the abandoned Pueblo dwellings (Fig. 17.14). The sheer face of the wall rises about 700 feet (213 m) above the canyon floor, filling the Romantic soul with awe in the presence of nature's grandeur.

By 1870, photography in America had become a proven medium for documentation, with capabilities for powerful expressiveness. In the first decades of its existence, there appeared more photographers than painters in America. The best American photographers obtained results that were technically and aesthetically the equal of anything being done in Europe. Photography brought portraiture within the grasp of the common man and woman, it turned its eye upon levels of society that had seldom before been depicted, it recorded the facts dispassionately, but often most perceptively, and with a realism that fascinated. It made graphic illustration an integral part of journalism. Photographers traveled to wherever the action was, be it the battlefield of Antietam or the lonely beauty and solitude of Yosemite. Some artists learned to use it as a tool, while others, particularly portrait painters, tried to compete with it. In these first few decades, photographers began to discover the artistic potential of their new medium.

CHAPTER TWENTY-FIVE

PHOTOGRAPHY: 1870–1900

After the Civil War, the West came to represent a land where life could begin anew. To soldiers returning north to find no jobs, to Southerners who saw only devastation and corruption around them, the West was a place of hope—both economically and psychologically. It was wild, unsettled, and difficult to get to, much of it either desert or mountains. The country now was divided not into North and South, but East from West Coast with a vast landscape separating the two—roughly between St. Joseph, Missouri, and Sacramento, California. The first order of business was to connect the two parts of the nation with a transcontinental railroad, which would also service the great intervening expanse. Congress appropriated funds to pay for the track. The Union Pacific moved westward out of Omaha, and the Central Pacific started eastward from Sacramento; the two companies met near Salt Lake City in 1869 (Fig. 25.1). The country was united. Soon spurs from this line and additional transcontinental systems carried settlers and supplies into the land, and the harvest out of it.

The next project for the government was to conduct a survey of that vast, largely unknown land to see what natural resources it held. A group of extraordinary men were involved with this project. In 1863, at age twenty-one, Clarence King and a friend set out across the continent, traveling on horseback to Nevada, on foot from there, over the Sierras, to San Francisco. King then explored unknown regions of California before returning east. Back in Washington, he convinced Congress of the necessity of a survey of the land between Colorado and California, which he conducted between 1866 and 1877. Published in fifty-seven volumes, King's report provided a wealth of theretofore unknown geological knowledge about the area. King's expeditions were so successful that Congress established a permanent agency—the United States Geological Survey—in 1878.

Ferdinand V. Hayden conducted a similar survey of the Wyoming Territory. Along the way, he picked up a gifted young photographer, William Henry Jackson, to document the expedition's discoveries. After the Civil War, Jackson had gone westward to seek his fortune in the silver mines of Montana, heading out of St. Joseph with a wagontrain. He ended up in California instead. Jackson next moved to Omaha, where he set up a photography studio. From there he made trips, traveling in a horsedrawn wagon-studio, to photograph Native Americans, settlers, homesteads, and the trans-continental railroad construction. About 1870 he received a commission for 10,000 stereographic views of the West, and while on that trip, he met Ferdinand Hayden. Jackson spent the next eight summers, until 1879, as Hayden's survey photographer. Later in his career Jackson worked out of Denver, photographing the western landscape, often on commission from the railroads, which wanted his pictures for publicity purposes in order to entice settlers to the lands now served by the Iron Horse.

John Wesley Powell returned home to Illinois after the Civil War to become a professor of geology. In 1869, sponsored by Congress and the Smithsonian Institution, he embarked on a three-month expedition to explore a 900-mile (1450-km) length of the Colorado River, through the Grand Canyon. He conducted other scientific expeditions into the western territories and the Rocky Mountains, and in 1880 succeeded King as director of the U.S. Geological Survey. Powell had a special interest in the Native Americans of these territories, and for many years he was director of the Bureau of Ethnology, a division of the Smithsonian.

Scottish-born John Muir's interests were geology and botany. As a young man he walked from Indiana to the Gulf of Mexico, keeping a journal about the flora and the terrain through which he traveled. By 1868 he was in California, where he spent part of the next six years exploring Yosemite Valley and studying glaciers and the great sequoia forests. Through a series of articles in *Scribner's* and *Century* magazines, Muir brought the magnificent beauty of the West to the attention of a broad audience. Muir is recognized as one of the early leaders of the conservation movement. He spearheaded the crusade to have Yosemite Valley declared a national park, which Congress did in 1890.

At the same time, fortunes were being made by men like Leland Stanford, William Henry Vanderbilt, and J. Pierpont Morgan. Stanford became president of the Central Pacific, and along with his colleagues Collis P. Huntington, Mark Hopkins, and Charles Crocker made millions in the railroad business. In 1885, he founded and endowed Stanford College in Palo Alto. Also at Palo Alto, Stanford maintained a

large farm for the breeding of thoroughbred horses; the riding and training of horses became one of the passionate interests of his life, which had significance in the history of photography.

William Henry Vanderbilt was the son of Cornelius the "Commodore," the founder of the family's fortunes. Upon the death of the Commodore in 1877, William inherited a vast sum of money, as well as control of huge railroad interests, which he deftly began pulling together. The Vanderbilt system soon connected New York, Cleveland, Detroit, Chicago, Cincinnati, and St. Louis. William Henry Vanderbilt doubled the size of the estate that had been left to him and used part of the money to build a grand Fifth Avenue mansion, which included an art gallery and what was reportedly the largest private art collection of its day.

In 1879, Vanderbilt chose a young financial genius named J. Pierpont Morgan (Fig. 25.9) to handle the sale of Vanderbilt railroad stock in England. Morgan did this expeditiously, marking the beginning of his rise to fortune and power in the world's financial circles. Morgan was an extraordinary entrepreneur, who bought out Andrew Carnegie in 1901, and put together the world's largest corporation, United States Steel. He was as aggressive in collecting art as he was in finance, and he formed one of the finest collections of Gothic and Renaissance art and Oriental porcelains of his day. He was also one of the major benefactors of the newly founded Metropolitan Museum of Art, of which he was president for many years.

The population of the United States leaped from thirty-eight million in 1870 to seventy-six million in 1900. Most of this was due to immigration. Irishmen provided much of the labor for the building of the Union Pacific Railroad, as Chinese did for the Central Pacific. In 1892, Ellis Island, in New York Harbor, became an immigration station. Through its portals over the next several decades passed millions of immigrants (Fig. 31.7). Although they became a part of the rich pageant of American life, few had fortune smile on them the way Andrew Carnegie did after he immigrated in 1848. Most lived wretched lives, huddled in the tenements that now began to sprawl throughout the cities. While painters took little note of their plight, photographers did (Figs. 25.10 and 25.11). In fact, very little of the American scene escaped the eye of the camera in the closing decades of the nineteenth century.

During this period, the photograph was used to document places and events, as a tool of the painter, and as a form of imagemaking in its own right. Painters such as Thomas Eakins became absorbed with and adept at making photographs. Others, like Jacob Riis, who in no way thought of themselves as artists, began to show America the expressive power of the photographic image. Important technical developments improved the equipment and the processes, for example, the discovery of the **dry plate**. With the introduction of flexible film and the portable, inexpensive Kodak camera, photomaking came within the reach of the general population.

PHOTOGRAPHY AND THE WEST

With the end of the Civil War, the nation turned to developing its enormous potential. Photographers, professional and otherwise, documented the enormous energy and accomplishments of this time. Captain Andrew J. Russell (1830–1902), who had been a member of Mathew Brady's Photographic Corps during the Civil War, was on hand when the two tracklaying parties of the Union Pacific met on 10 May 1869, at Promontory Point, Utah (Fig. 25.1). In the middle of the photograph, shaking hands, are Samuel Montague (left), chief engineer of the Central Pacific, and his counterpart for the Union Pacific, Grenville Dodge. The whole nation celebrated the event, and the popular illustrated newspapers of the day carried engravings of scenes similar to Russell's picture. American engineering genius, capitalism, and entrepreneurship are praised in the central figures, but American labor and the common man—the rowdy, rough-and-tumble unknown worker whose muscle accomplished this remarkable feat—are also lauded. The picture was posed, but not composed in the manner of Renaissance-Baroque compositional theory as practiced in the studios of academic painters. The seeming naturalness of the arrangement lends verity and immediacy to the image, and coordinates perfectly with the naturalism of the photographic medium. It is a picture of capitalism and labor caught in an heroic moment, while expressing the spirit of a new kind of Manifest Destiny. This was documentary photography that used the camera in its own natural way to record the memorable moment.

EARLY PHOTOGRAPHERS

The expansive, wild reaches of the nation fascinated Americans, who learned about them bit by bit as the railroads cut into them. People wanted pictures of the new lands, and it was to the advantage of the railroad owners—to whom Congress had given enormous tracts paralleling the rail lines—if interest was fanned through images of these lands. Bierstadt, Moran, and others provided paintings of such subjects for the wealthy—but it was the photographers who brought their relatively inexpensive images into the hands of many.

Two of the earliest photographers who went west, in the 1860s and early 1870s, were Carleton E. Watkins and Timothy O'Sullivan. Others followed, and among the best was William Henry Jackson (1843–1942). When Ferdinand Hayden saw Jackson's photographs he invited him to join his expedition. The resulting series of images—towering mountains, sweeping valleys, spouting geysers, and steaming hot springs—so completely captured the imagination of the nation that they were instrumental in causing Congress to create the first national park—Yellowstone—which President Grant signed into law on 1 March 1872.

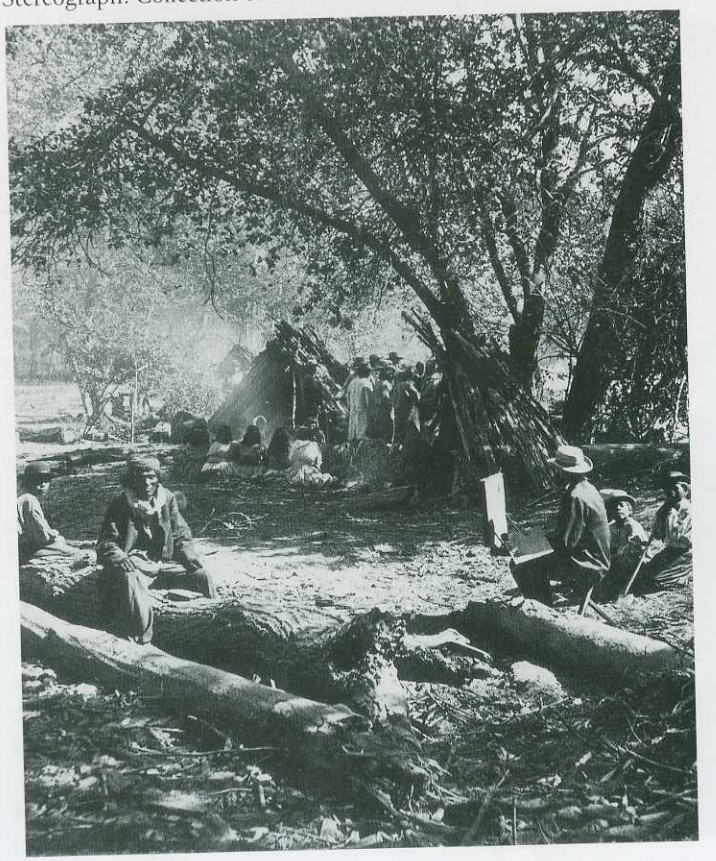
25.1 Andrew J. Russell, *Meeting of the Rails*, Promontory Point, Utah, 1869. Photograph. Union Pacific Railroad Collection, Historical Museum, Omaha, Nebraska.

25.2 William Henry Jackson, *The Grand Canyon of the Yellowstone*, 1871. Photograph. Library of Congress.

Jackson carried his equipment—several cameras, hundreds of glass plates, processing materials, tents, and everything else he needed—on pack mules, into some of the most rugged mountainous areas in the United States. The results were pictures such as *The Grand Canyon of the Yellowstone* (Fig. 25.2). To do justice to the scale and sublime grandeur of his subject matter while photographing the Rocky Mountains, Jackson used a largesize glass plate that measured 20 by 24 inches (50.8 × 61 cm). This was unheard of in that day, and the fact that the extremely fragile plates had to be transported about in such regions did not fail to impress Americans generally. Pictures like that shown in Figure 25.2 remind us of paintings by Jackson's good friend and occasional companion Thomas Moran, who painted similar subjects, as a comparison with Figure 15.28 demonstrates. Jackson's image gave a sense of the reality of the place—it truly did exist, as seen in the photograph, which everyone knew could not be exaggerated or romanticized the way artists' paintings could be.

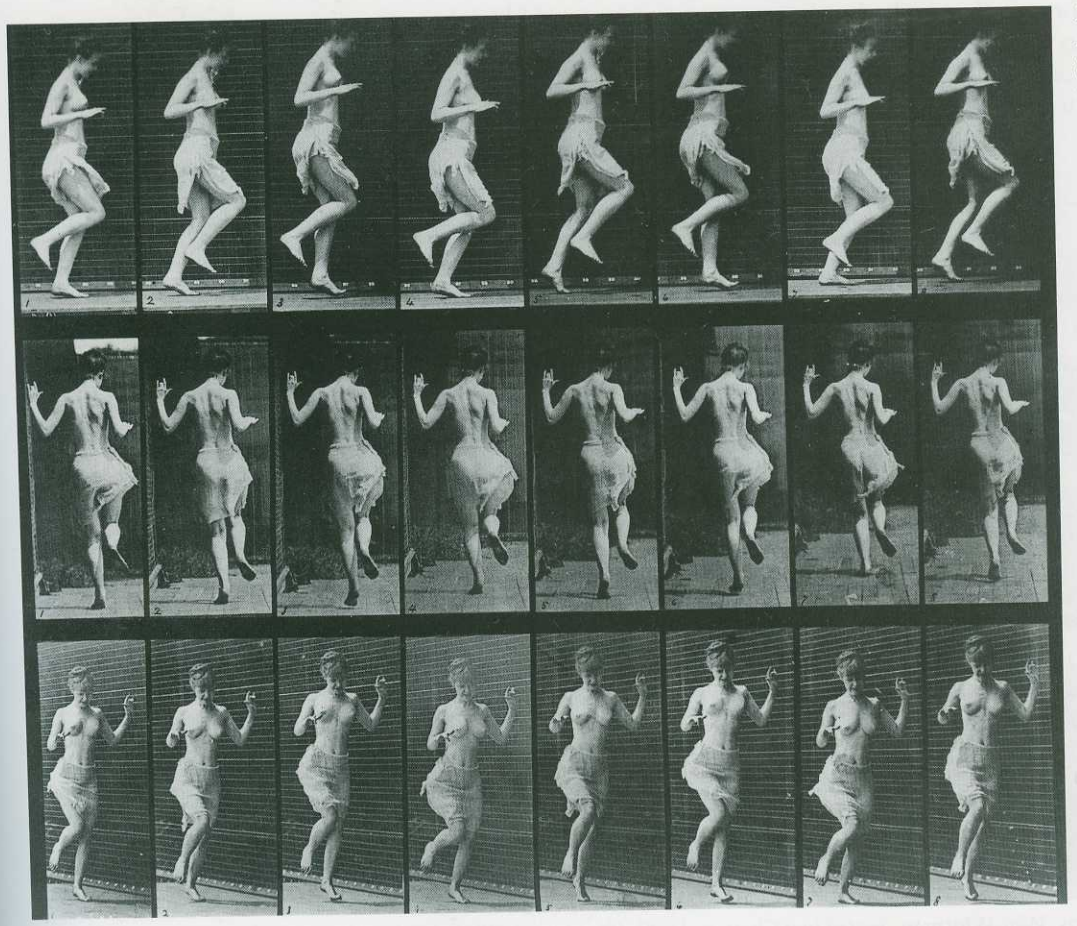
Photographers like Jackson encountered Native Americans as they traveled about the West, and they recorded them with their cameras as George Catlin (Fig. 15.18) had done thirty years earlier with his paintbrush—sometimes in portraits, sometimes in general views of village life. Eadweard Muybridge (1830–1904) took an interesting shot of the painter Albert Bierstadt seated before his easel, painting a group of Native Americans at Mariposa, California, the gateway to Yosemite Valley (Fig. 25.3). Within twenty-four hours of seeing Muybridge's photograph, Bierstadt reportedly had incorporated much of it into the painting *Indians in Council, California* (New York art market, 1972). In a newspaper review of an exhibition of the Yosemite photographers then being shown in San Francisco, the *Alta California* reported on 7 April 1873 that "Muybridge has produced . . . a series of eight hundred of the most perfect photographs ever offered for public inspection . . . . The view of Temple Peak . . . should be taken as a subject for a great painting, and probably will be by Mr. Bierstadt." Muybridge published the photo of Bierstadt as one of his many stereographs—double images that were viewed through a stereoscope, which was found in nearly every parlor at this time. Photography had become an important form of amusement and learning at home.

25.3 Eadweard Muybridge, *Albert Bierstadt's Studio*, 1872. Stereograph. Collection of Leonard A. Walle, Novato, California.



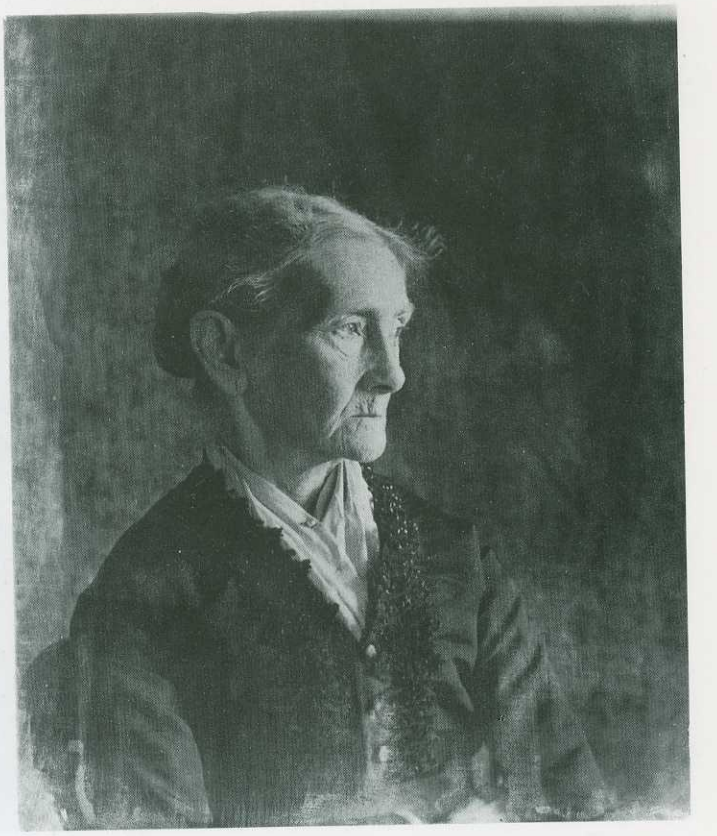
Muybridge had emigrated to America from his native England in 1852, settled in San Francisco three years later, and sometime in the 1860s had learned the photographic processes. He had already roamed about in the enchanted valley of the Yosemite in 1860, and he returned a second time in 1867, this time with a camera. His large (16 × 20 in; 40.6 × 50.8 cm) pictures, printed from glass-plate negatives, were so impressive when they were exhibited in America and Europe that he enjoyed immediate international acclaim. By 1868, Muybridge had joined a government survey expedition in Alaska as its photographer, and in 1875–6 he was in Central America taking views. Although these wanderings all produced extraordinary images of landscapes, native peoples, and men building railroads, Muybridge is best remembered for another kind of documentation—humans and animals in motion.

In 1872, Leland Stanford, former governor of California, wagered a friend $25,000 that a running horse had all four feet off the ground when at full gait. To prove his point, Stanford commissioned Muybridge to photograph one of his favorite horses in motion. Along a racetrack at Stanford's Palo Alto ranch, Muybridge set up a series of cameras, which were tripped by wires strung across the track as the horse ran the course. For the first time, it was possible to see the actual stages of an animal's movement. Stanford won the bet. Muybridge's fame soared. The University of Pennsylvania became interested, and in 1883 invited the photographer to pursue his work in documenting locomotion under its auspices. Figure 25.4 is but one of innumerable series Muybridge made. At this time the painter Thomas Eakins and Muybridge worked closely together on the project. Eakins also made similar photographs showing the movement of a jumping boy in eight positions within a single frame. Eakins is known to have applied the "truth" learned from his motion studies of horses to his painting *The Fairman Rogers Four-in-Hand* (1879, Philadelphia Museum of Art). It should be noted that at that time in France, Professor Etienne Jules Marey was conducting similar experiments, as was Ottomar Anschutz in Leszno, Poland.



25.4 Eadweard Muybridge, *Female Figure Hopping*, 1887. Sequence photography, plate 185 from *Animal Locomotion* (Philadelphia, 1887). National Museum of Design, Cooper-Hewitt Museum, New York City.

25.5 (below) Thomas Eakins, *Mrs. William H. Macdowell*, c. 1882. Photograph. Metropolitan Museum of Art, New York City.



THE AESTHETICS OF PHOTOGRAPHY

Thomas Eakins had known, or at least corresponded with, Muybridge several years before the photographer arrived in Philadelphia. He also had owned a set of the action photos of horses, and had begun making photographs before their meeting. In the years before Alfred Stieglitz determined to make photography an art, Eakins became one of the most adept manipulators of the medium.

Eakins used the camera to record many of the effects he had begun to achieve in his painted portraits, as in *Mrs. William H. Macdowell*, a photograph of his mother-in-law (Fig. 25.5). The careful control of light, introduced from one side, against a dark background, rendered his subject in a deeply pensive mood amid a great stillness, lost in her own thoughts. About a decade later, this same crossover of influences is found in his portraits of his longtime and aging friend, the poet Walt Whitman. The photograph of Whitman (Fig. 25.6) possesses certain qualities also found in the painted portrait by Eakins, one version of which is at the Pennsylvania Academy. A series of photographic studies exists of Amelia van Buren, of whom Eakins also painted a portrait (Fig. 23.15). These, like the painting, are marvelous

25.6 Thomas Eakins, *Walt Whitman, Seated in a Chair*, c. 1890. Photograph. Philadelphia Museum of Art.

25.7 William B. Post, *Summer Days*, 1895. Photograph. International Museum of Photography, George Eastman House, Rochester, New York.

studies of mood and personality. But while there are innumerable photographs of his which are directly related to his paintings, there is evidence that Eakins saw the camera as an instrument capable of producing aesthetic imagery in its own right.

There were a number of amateurs exploring the aesthetic possibilities of the photographic image during these years. William B. Post (1857–1925), although an amateur, was also a member of the Photo-Secessionist movement (see chapter 31). Retiring from his position as a New York financier in his mid-fifties, Post moved to Freyburg, Maine, where he had spent his summers for many years. His great joy was in photographing ladies with parasols strolling or in hammocks, or drifting about in a small rowboat on a lily pond, as in *Summer Days* (Fig. 25.7). The Englishman Peter Henry Emerson was one of the earliest to theorize on photography as art, and Post undoubtedly knew Emerson's writings and examples of his pictures. Post's *Summer Days*, for example, is a paraphrase of Emerson's *Gathering Water Lilies* of 1886.

Pictures such as these—Post's and Emerson's alike—were known to a wide, international audience, thanks to the new process called **photogravure** which allowed the printing of photographs in popular graphic media, particularly newspapers. One cannot help but think, when looking at Post's *Summer Days*, of pictures by contemporary American Impressionists—for example, Cassatt's *The Boating Party* (Fig. 23.25) or Chase's *Idle Hours* (Fig. 24.1). A scene in the open air, bathed in light and filled with shimmering reflections; a casual, middleclass subject, seemingly uncomposed; a passing moment—all these reveal that the cameraman was attempting to replicate what the Impressionist painter had done.

PORTRAITS AND SOCIAL COMMENTARY

Portraiture remained one of the primary areas of photography. Napoleon Sarony (1821–96), the leading portraitist in New York after Mathew Brady moved to Washington, D.C., in the mid-1870s, had begun his career as a lithographer in 1846, but learned photography while visiting his brother in England. By 1864, he had established his studio in New York City, where he made a fortune taking portraits of the leading actors and literary figures of the period. In many ways, Sarony followed the example of Disdéri, the Parisian photographer who made the carte de visite so popular after 1854. Cartes de visite, which measured only about 4 by 2½ inches (10 × 6.4 cm), usually represented famous persons, and it was popular to collect them. Sarony's studio was filled with props—everything from stuffed birds to an Egyptian mummycase—which he incorporated into his portraits.

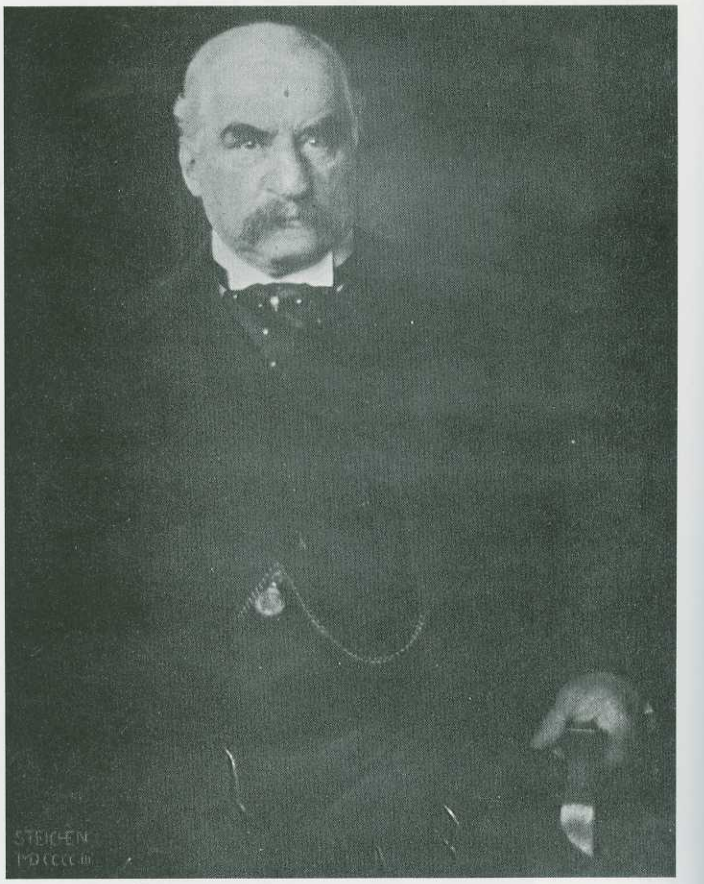
Typical of Sarony's work is the melodramatic portrait of Sarah Bernhardt (Fig. 25.8). The celebrated French actress was at the height of her fame when she arrived in the United

25.8 Napoleon Sarony, *Sarah Bernhardt*, c. 1880. Photograph. International Museum of Photography, George Eastman House, Rochester, New York.

States in the fall of 1880, following spectacular successes in Paris and London. Her portrayal of Camille in Alexandre Dumas *fils*'s *La Dame aux Camélias* had captivated American audiences (reportedly, Cornelius Vanderbilt attended every performance and wept openly as the Divine Sarah expired in the closing scene). Sarony photographed Bernhardt as Camille in her dying swoon, capturing the theatricality of this highly emotional moment.

If Sarony's reputation rested on his theatrical photographs, another kind was developed for the mighty tycoons of American finance and industry. As in the painted portraits of this same group, the massive form and imposing demeanor of the subject were usually presented in a dark tonality with light falling primarily on the face. The photograph of J. Pierpont Morgan is a typical example (Fig. 25.9). The camera was manipulated to capture the sense of presence, the dynamic vigor, the bold assertiveness of the sitter. The London *Times* referred to Morgan as a man of genius and taste, and compared him to Lorenzo the Magnificent, that greatest of princely Florentine patrons of the fifteenth century.

A very different picture of America was presented in a remarkable book, *How the Other Half Lives* (1892), by Jacob Riis. Riis (1849–1914) came to America in 1870 from his native Denmark. As a police reporter for the *New York Tribune*, his work carried him into the tenement slums and unsavory hideouts of the teeming city, where people lived without daylight, ventilation, or sanitation, where filth,



25.9 (above) Edward J. Steichen, *J. Pierpont Morgan, Esq.*, 1903. Photogravure, from *Camera Work*, c. 1906. Morris Library, University of Delaware, Newark, Delaware.

25.10 Jacob Riis, *In Poverty Gap: An English Coal-Heaver's Home*, c. 1889. Photograph. Museum of the City of New York.

25.11 Jacob Riis, *Bandits' Roost, Mulberry Street, New York*, c. 1888. Photograph. Museum of the City of New York.

disease, and hopelessness completed the human degradation. Here was what the Englishman James Bryce described in his book *American Commonwealth* (1888) as "the conspicuous failure of the city."[1] The people of the slums were no longer viewed as colorful, charming, or picturesque subjects for painters who romanticized their plight. The camera's objective eye now presented such scenes with brutal realism.

Riis took up the camera along with his pen, as he began his crusade against social and economic injustices. Pictures such as *In Poverty Gap: An English Coal-Heaver's Home* (Fig. 25.10) documented the wretched conditions of the working poor with such realism that when they were seen in the pages of *How the Other Half Lives*, a reform movement followed.

Riis considered that to be the sole purpose of his photography, and never thought of it as being related to art. Sometimes Riis took pictures at his peril, as with *Bandits' Roost*, in which one clearly senses the suspicion and the hostility directed at the intruder with his camera (Fig. 25.11). Here was a back alley known for its gangs and the murders that occurred there regularly. The picture—which was used as evidence in a murder trial—so moved the then police commissioner of New York City, Theodore Roosevelt, that he began a crackdown to eradicate such festering sores. As a direct result of the books and photographs Riis published, the public social conscience was awakened to the urgent necessity for reform. When a large section of the tenements was torn down and a new housing project erected, the latter was named after Jacob A. Riis.

25.12 Fred Church, *George Eastman on Board Ship*, 1890. Photograph. International Museum of Photography, George Eastman House, Rochester, New York.

CAMERAS FOR EVERYONE

Riis has been credited with the introduction of the flash in American photography—a necessity for him when he worked in the dim light or darkness of back alleys and windowless tenement rooms. There were many improvements in the photographic process between 1870 and 1900. In mid-century photography, the negative was made on a chemically sensitized glass plate—that is, a sheet of glass was coated with collodion solution (guncotton, ether, and alcohol), mixed with silver iodide and iodide iron. The glass plate was slipped into the camera while the solution was still wet, and exposed. As soon as it was dry, a contact print, which was the same size as the plate, could be made. These were laborious to prepare, messy, difficult to transport, and limited picture-taking to the professional photographer. The next step came with the English invention of the dry plate, which was coated with light-sensitive gelatin-bromide. Now, readymade plates could be produced.

George Eastman, a bank employee by day, spent his evenings developing a superior form of dry plate which made him famous as a producer of photographic supplies. Eastman first developed sensitized paper, then film that could be put on a roll in a small, handheld camera. By 1888, his factory was producing the famous Kodak model. This made Eastman one of America's richest men, for amateur "shutterbugs" bought it by the tens of thousands. Figure 25.12 shows Eastman holding one of his magic black boxes.

By 1890, the negative had been reduced in size, so that nearly fifty would fit on a roll in the Kodak. That necessitated the invention of the enlarger for the printing process, and George Eastman assured all amateurs that he would take care of enlarging and printing as well—his motto was, "You press the button, we do the rest." When the roll of film was totally exposed, camera and film were sent to the Eastman Company in Rochester, New York. The prints were made, and returned to the owner along with the reloaded camera. While it was the amateurs who made Eastman rich, his compact Kodak, with its interchangeable parts, prepared the way for more convenient professional cameras as well. A revolution in imagemaking had been launched.