



HISTORY

Trap for Facts, Tool for Progress

THIS BOOK PRESENTS A GALLERY of some of the most influential photographs in history: those that have moved people and nations, recorded achievements and tragedies, opened our eyes to previously unseen aspects of nature. It is arranged in roughly chronological order, so along the way, it documents the medium's evolution, as the novelty of a few 19th century amateur tinkerers evolved into photography, and the camera became a potent new force for observing and changing the world.

Three names dominate the early era of photography: France's Joseph Nicéphore Niépce and Louis Jacques Mande Daguerre and Britain's William Henry Fox Talbot. Niépce was a retired army officer and amateur inventor who partnered with Daguerre, a Paris stage designer and entrepreneur, to turn Niépce's first, halting experiments with recording images of reality on pewter plates into the earliest widespread form of photography, the daguerreotype. These images were small, one-off portraits on silver-plated copper sheets that created a sensation in

Europe and the U.S. after their introduction in 1839.

But daguerreotypes required long exposure times, forcing subjects to maintain a stiff pose for several minutes, neither blinking nor smiling. And they could not be duplicated: each of them was unique, one-of-a-kind. It was Fox Talbot who solved this problem with the photographs he called calotypes, Greek for "beautiful picture." His calotypes recorded reality as a negative image on paper, from which multiple positive copies could be printed. This technique, increasingly refined, helped photography become a mass medium.

Daguerreotypes and calotypes were tame creatures of the parlor and the studio. But advances in technology soon helped cameras hit the road. Fox Talbot's paper negatives were replaced in the 1850s by a glass plate coated with emulsion and inserted into a heavy box camera. The process was cumbersome, for the images on the glass had to be developed immediately, but it made photography more mobile.

British photographer Roger Fenton took his box cameras to the Crimean Peninsula to record Britain's war with Russia in the 1850s. While long exposure



Developing photography At far left is a daguerreotype image of the inventor of the first widely used form of photography, Louis Daguerre. In the center, Henry Fox Talbot, on right with box camera, and his assistants create calotypes at his estate in England.

At near left, Mathew Brady, on left, and an assistant make camp outside a horse-drawn darkroom during the American Civil War

times kept him from recording action scenes, he documented the war's camp life and battlefields.

In the next decade, American photographer Mathew Brady commissioned a corps of photographers to record images of the Civil War, fitting them out with traveling, horse-drawn darkrooms in which the exposures were developed; Union soldiers called the conveyances "whatizzit wagons." Yet printing presses could not yet render the gray areas in black-and-white photos, so publishers employed artists to make line drawings based on the pictures.

The halftone process, perfected by U.S. and German inventors in the 1880s, at last allowed photos to be printed, leading to an explosive growth in news pictures and the publications that featured them. In the 1890s, the advent of flash-lighted photography allowed cameras to record scenes at night.

As the 19th century came to an end, technical advancements made cameras smaller and more affordable, taking them out of the hands of professionals and putting them in everyone's grasp. Now amateur photographers who experienced news events in progress could record them for posterity. In the 1890s, flexible film helped create a powerful new kind of photography, motion pictures.

As the innards of cameras evolved, the uses to which they were put widened: photographers began using them to document society's ailments. American activists Jacob Riis and Lewis W. Hine created compelling pictures of poverty and discrimination

that raised awareness and led to progressive laws. In the fine phrase of TIME critic Richard Lacayo, the camera was once a mere "trap for facts." Now it became a tool to drive social progress.

Photojournalism blossomed in the first decades of the 20th century. Picture-driven magazines were first created in Germany; in the U.S., publisher Henry Luce unveiled a magazine devoted to photojournalism, LIFE, in 1936. At the same time, the introduction of small, light, 35-mm cameras allowed photographers to record events more nimbly and to capture more intimate situations. Color film was introduced, recording reality more truthfully, if less dramatically, for the austerity and unreality of black-and-white images lend them a heroic grandeur.

At the turn of the 21st century, photography took another large step forward, with the development of digital cameras: Farewell, film and darkroom. Yet however quickly the technology of photography advances, the best photojournalism works its magic in the slow lane, as the memorable photos in this book prove: it is the time we spend scrutinizing these still images, absorbing their messages, that matters.

The Greek scientist Archimedes once declared that, with a lever long enough and a purchase strong enough, he could move the world. He had the right idea, but the wrong tool: it is a lens, not a lever, that created the pictures in this book, 100 images that changed the world. ■

—The Editors