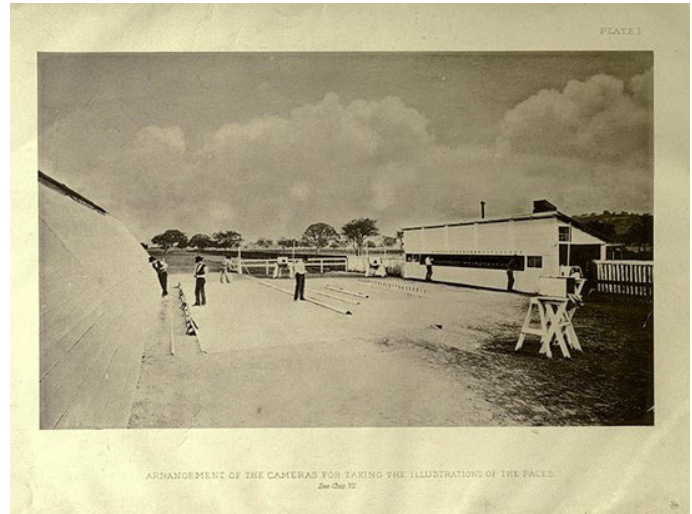




Charles Bentley, Full Cry, from Fox Hunting, 1828, color aquatint on paper. Before Muybridge's experiments in instantaneous photography recorded the moment-by-moment motion of a horse at full gallop, artists did their best to estimate the appearance of a galloping horse in fine art.



Eadweard Muybridge's equipment for motion photography at Palo Alto in 1878. The twelve cameras utilized in Muybridge's famous racehorse experiment were placed approximately twenty-one inches apart. The resulting photographs were published in 1881 to great acclaim.

century than the invention of photography. Capturing the world precisely as it appeared, photography helped redirect artistic investigations of the world toward the expressive and the conceptual. No longer was the painter's first responsibility to represent the world as it was, for posterity. Now, artists were free to use color and form in more abstract ways. Impressionism, for example, emerged in 1872, the same year that the British-American photographer Eadweard Muybridge

was commissioned to conduct a series of photographic experiments on animal locomotion in California. In order to study the movement of a galloping horse—a movement too fast for the human eye to register in detail—Muybridge deployed technological advancements in rapid shutter speed. In doing so, he developed a new kind of image-making: instantaneous photography.

SELECTED WORK: *The Horse In Motion, "Sallie Gardner,"* Eadweard Muybridge, c. 1878

In the 1870s, scientists hotly debated what was then a huge question: was there any moment in a horse's gait when all four of its hooves left the ground at the same time? Was there, in other words, any moment when a horse was suspended in midair? This issue was taken up by none other than Leland Stanford: railroad magnate, industrialist, founder of California's renowned Stanford University, and racehorse owner. Commissioning the British-American landscape photographer Eadweard Muybridge to work with him on the project, Stanford wagered that a horse did indeed have all four legs off the ground for a brief moment in time, one that passed too quickly for the naked eye to see. The resulting work transformed Muybridge's career and became the launching point for the first scientific study of motion using the technology of photography.

At Stanford's personal racecourse in Palo Alto, California, Muybridge devised a method for photographing a horse in motion using a series of twelve cameras spaced at twenty-one-inch intervals and attached to wires that were tripped as the horse galloped down the racecourse. For the experiments, Muybridge designed his own high-speed electronic shutter and electro-timer. Coupled with electrically powered shutter speeds of up to 1/1000th of a second, Muybridge's stop-action photographs revealed a new reality that broke time and motion into discrete, measurable, and visible units.