On the surface, Leland Stanford and Eadweard Muybridge were an odd couple. One of the wealthiest men in the United States, Stanford lived high, dressed well (rarely leaving home without a top hat and an ivory-headed, gold-inlaid cane), said little and exuded rectitude and dignity. Fast-talking, intense and unkempt (with a beard down to his chest, dirty pants, dusty boots and a sombrero), a self-proclaimed artist and visionary, Muybridge had committed a premeditated murder that nearly sent him to the gallows.

Nonetheless, Edward Ball reveals, the two men had a lot in common. Having migrated to the West when they were young, they were "Old Californians" who embodied the very American tendency of men on the make to reinvent themselves. Muybridge changed his name (Muggeridge, Helios, Eduardo Santiago, Muygridge, Eadweard Muybridge) as often as he changed professions (bookseller, banker, inventor, photographer) - while Stanford moved on up as a lawyer, grocer, politician, railroad tycoon and philanthropist.

Most important, Stanford and Muybridge loved gadgets. And when on Jan. 16, 1880, at the Stanford home in San Francisco, Muybridge used stop-motion photography to put his employer's race horses (at full speed) on a screen, he laid claim to be an originator of motion picture technology.

Set securely in the context of the culture of the Gilded Age, "The Inventor and the Tycoon" provides a beautifully written account of the collaboration of these two ambitious, contentious and ultimately incompatible men. "The code Muybridge cracked," Ball writes, "the crime he committed for which no one charged him, was the kidnapping of time" inside a device that could bring the past into a perpetual present. Like most inventions, Ball points out, motion pictures required "a pile of capital and a parallax view of art."

The author of "Slaves in the Family," which won the National Book Award for Nonfiction, Ball is an expert himself in kidnapping time and bringing dead men and women back to life. For "The Inventor and the Tycoon," he has made superb use of archives on two continents. To compensate, perhaps, for gaps in the evidence - and biographers always discover gaps in the evidence - Ball has deployed several "writerly" techniques.

With mixed success. Events do not unfold chronologically. Ball also inserts himself into the narrative, with a report, for example, of his trip in 2010 to the California State Railroad Museum, located on I Street in Sacramento (which houses the records of Stanford's Central Pacific), where the patrons were men over 60, with a predilection for flannel shirts and "a gentle kind of fetish, the one for old trains."

Nor does Ball hesitate to speculate. Asking himself whether "the curious detail of women running the gaming till" suggests that Stanford's Empire Saloon was a brothel, Ball notes that "the absence of evidence of prostitution is not evidence of absence." The deaths of young Ted Muggeridge's father and brother, he guesses, may explain why he chose so often to live "like a castaway, deracinated and drifting." Ball then imagines the adult Muybridge selling shares of Austin Consolidated Silver Mines "to businessmen in heavy mustaches, cigars in their hands. ... gesturing with his arms in the air, his chin rising, voice falling on the word 'Nevada,' spraying a little fantasy about a gush of money."

To his credit, Ball alerts readers every time he uses his literary license. And he doesn't embellish when he describes the surprisingly sad endings to the lives of the tycoon and the inventor.

Stanford never compensated Muybridge for the stop-motion project he commissioned, Ball reveals, and came to resent the accolades his former friend received. Stanford subsidized the publication of a book, "The Horse in Motion," that contained five photographs, 91 photolithographs based on Muybridge's prints, and only one reference, in passing, to the inventor. Muybridge sued for copyright infringement - and lost.

Stanford, however, derived scant satisfaction from the incident. Devastated by the death of his 15-year-old son, he spent millions establishing a university named for Leland Jr., but never really recovered.

Muybridge had his 15 minutes of fame - but not much more. Although Thomas Edison appeared to agree to Muybridge's proposal that they work together to combine the features of his zoopraxiscope (the motion projector he never patented) with Edison's phonograph, the Wizard of Menlo Park, "who was not shy about taking ideas of others and writing his name on them," developed a kinetograph movie camera and a kinetoscope peep-show box, both using celluloid film. In 1894, Edison's Kinetoscope Co. made $89,000, the equivalent of $2.5 million in 2010.

Muybridge died in 1904, about 20 years after he opined that pictures in motion "are generally found amusing" - and shot his last photograph. It seems oddly appropriate, Edward Ball tells us, that his gravestone reads "Eadweard Maybridge."
The Inventor and the Tycoon
A Gilded Age Murder and the Birth of Moving Pictures
By Edward Ball
(Doubleday; 464 pages; $29.95)
Glenn C. Altschuler is the Thomas and Dorothy Litwin professor of American studies at Cornell University. E-mail: books@sfchronicle.com

Ads by Yahoo!