

ASEE PRISM November 2008

BRIEFINGS

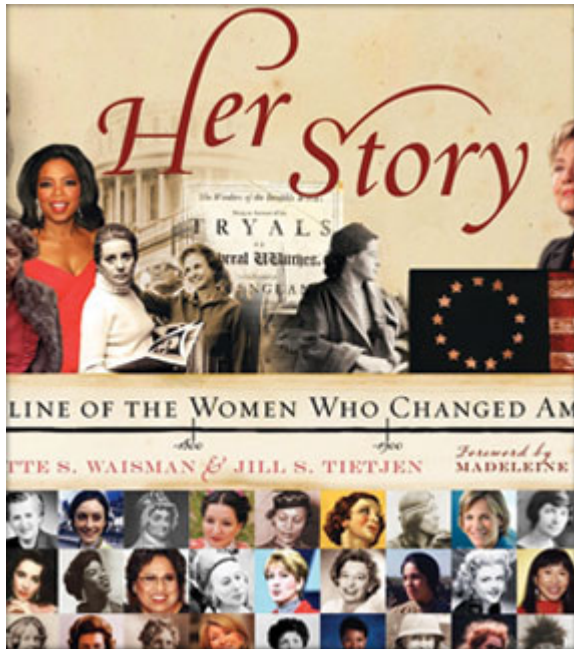
TONGUE MACHINE + DESERT FARMING + FAKE VAN GOGHS



SCULPTURE

BIG TOP MECHANICS

Alexander Calder's training as an engineer helped him ultimately to create massive sculptures requiring precise equilibrium. But he honed his mechanical ingenuity — and whimsy — tinkering with miniature circus figures like those in "Prima Donna, Woman with Bow, and Horse" (123/8" x 51/2" x 6") at right. It's now on display at New York's Whitney Museum of Art, part of the exhibit Alexander Calder: The Paris Years, 1926-1933, which runs until February 15, 2009. Henry Petroski discusses engineer-artists in this month's [Refractions](#).



HISTORY

MOTHERS OF INVENTION

The machine that folds paper bags with flat, square bottoms was invented in 1870 by Margaret Knight, only one of more than 850 women featured in a new book, *Her Story: A Timeline of the Women Who Changed America*. The 272-page, impressively illustrated book marks women's achievements in a variety of areas, including technology, academia, politics and sports. Some are well-known, like astronaut Sally Ride and environmentalist/biologist Rachel Carson. Others less so, like chemist Stephanie Kwolek, who in 1965 invented the bullet-proof material Kevlar.

Author Jill S. Tietjen, a former president of the Society of Women Engineers, now runs *Technically Speaking*, a consulting company aimed at improving women's career opportunities in technology. Tietjen also co-authored *Setting the Record Straight*, a history of women in engineering and the "learned professions," and wrote *Keys to Engineering Success*, a first-year textbook. Coauthor Charlotte S. Waisman is a writer and consultant who has worked in human resources and corporate development for several tech companies. —Thomas K. grose