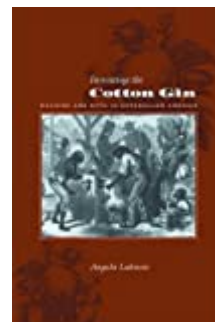




Angela Lakwete. *Inventing the Cotton Gin: Machine and Myth in Antebellum America.* Baltimore and London: Johns Hopkins University Press, 2003. xiii + 232 pp. \$45.00 (cloth), ISBN 978-0-8018-7394-2; \$25.00 (paper), ISBN 978-0-8018-8272-2.



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Whitney and “The First Cotton Gin”

To grace the cover of her book’s paperback edition, Angela Lakwete chose William L. Sheppard’s illustration, “The First Cotton Gin,” first published in *Harper’s Weekly* in 1869. In it, Sheppard drew planters evaluating ginned cotton and slaves operating a roller gin, a forerunner to Whitney’s famous invention. The image, Lakwete argues, gets to the heart of the matter: the question of Eli Whitney’s paternity of that most troublesome of all American inventions, the cotton gin, as well as the role southerners of both races played in its invention. Sheppard sought to dilute what historians since the early nineteenth century had promulgated, the myth—still alive and well in most textbooks—that no other gin existed before Whitney’s eureka moment in 1794. While on a visit to Georgia, the myth continues, Whitney (full of Yankee ingenuity but new to the cotton industry) came to the rescue of black and white southerners (a head-scratching bunch of dimwits who could only think to finger gin the cotton) by solving the problem of quickly extricating seeds from cotton without (completely) destroying the fiber. By identifying the northern mythmakers and the southern debunkers, as well as providing a painstaking explanation of the evolution of the ancient invention,

Lakwete properly exposes cotton gins (not just Whitney’s) as cultural artifacts with ample historical baggage. In doing so, she begins a long overdue revision of what textbooks and history teachers have mistakenly preached regarding Whitney, cotton gins, and the lack of southern ingenuity. Of course, change takes time. In the decade since Lakwete’s scholarship forced this professor to revise his classroom comments about gins, rare is the student who does not revert reflexively, on exams and papers, to the Whitney myth.

A graduate of the Hagley Program in the History of Industrialization at the University of Delaware and now an associate professor at Auburn University, Lakwete organizes *Inventing the Cotton Gin* chronologically through the first five chapters, and thematically in the last three. Exploding the Whitney myth in the book’s opening sentence, she introduces readers to cotton varieties and early cotton gins in the first chapter. So much for a surprise ending. Global in scope and research, this chapter also features the emergence of single roller gin technology during the first century C.E. and its dispersion throughout Asia, Africa, and North America. Dou-

ble roller gins appeared about a dozen centuries later in India and China, but did not dislodge the single roller. Lakwete completes this background chapter by illustrating Great Britain's rise in the world textile trade.

In chapter 2, Lakwete narrows the focus to the Americas and advances the timeframe to the eve of Whitney's invention. Planters in the Caribbean dominated cotton production early in the eighteenth century, but mainland producers reentered the trade in the 1770s when the British mechanized cotton spinning. Lakwete describes American inventions such as the fully foot-powered gin, the barrel gin, and Joseph Eve's self-feeding gin as conservative modernizations of the roller gin, "faithful to the pinch principle" and successful in preserving the quality of the cotton fiber (p. 46). Contrary to popular belief, ginning was not a bottleneck for the American industry before Whitney. Lakwete also provides interesting background on the policy debates of 1787 between Tench Coxe, the "father of the American cotton industry," and Thomas Jefferson over the role of government in economic development (p. 36).

Reinforcing her thesis that Whitney was just one of several important inventors of the gin, Lakwete presents his story in detail in chapter 3. Covering the years 1790-1810, she argues that Whitney's unique contribution was to patent a "new ginning principle" and a "new kind of gin," the wire-toothed gin (p. 47). The new machine pulled the short staple fiber from the seed more quickly than the roller gin's pinching action, enhancing quantity over quality and forcing textile and cotton producers to reevaluate their priorities. Modifications to the wire-toothed gin by other inventors led to the saw gin and a series of lawsuits. Lakwete demonstrates that Phineas Miller, Whitney's partner, and William Johnson, a judge in one of the many patent lawsuits, helped invent the Whitney myth by "collapsing" two centuries of successful roller ginning into Whitney's invention, and thereby created THE moment of southern economic discontinuity (p. 71). Lakwete begs to differ. The saw gin represented a different form of gin from what had come before, but the change was not, as has been widely proclaimed, similar to the jump from horse and buggy to automobile.

Planters and gin makers did not abandon the roller gin immediately. In chapter 4, Lakwete depicts the thirty-year transition from the roller to saw gin as more evolutionary than revolutionary. While the roller gin represented "a colonial past" and the saw gin the modernity championed by Tench Coxe, Americans were relatively slow-slower than textbooks portray-to fully embrace

the saw gin technology (p. 72). The roller gin remained a strong competitor until the late 1820s, but saw gin makers hastened its demise by aggressively advertising and developing a strong manufacturing infrastructure. By not keeping up, roller gin makers found their products pushed out of the rapidly expanding short-staple market and restricted to the limited market for long-staple cotton. Textile manufacturers allowed themselves to be seduced by the saw gin's edge in quantity, and they adapted to the shorter, lower quality fiber. Lakwete spends most of the chapter discussing the development of new communities of cotton gin makers in Georgia, Mississippi, South Carolina, and Alabama. The transition to saw gins ended with the creation of large saw gin manufacturing companies, two in Bridgewater, Massachusetts and one in Triana, Alabama. By demonstrating the vitality of innovation in the South, as well as the North, Lakwete explores a related set of reoccurring themes in the next few chapters: the power and breadth of southern industrialization and the collaboration of northern and southern manufacturers and consumers.

Not surprisingly, sectionalism takes center stage in chapter 5, which covers the final decades of the antebellum era to the end of the Civil War. Lakwete describes this period within the saw gin industry as "a case study of southern industrialization" due to the developing manufacturing industry that incorporated the region's agriculture (p. 97). Although gin makers in Massachusetts became more prominent, and northerners directed the South's biggest factories, southern manufacturers were important in the industry, and southerners were not dependent on the North for this most vital machine. Southern mechanics and manufacturers congregated in county seats, forming "zones of industrialization" where innovation thrived in gin manufacture, and later, in firearms production for the Confederacy (p. 97). Southern gin makers, such as Daniel Pratt, Samuel Griswold, and T.G. Atwood, employed free blacks and slaves who contributed to the "innovative industry that blurred regional and racial distinctions as it reinforced them" (p. 98). Lakwete discusses the differences between northern and southern firms, and wrestles with the question of what role enslaved African Americans played in the industry.

Fluctuations in cotton prices during much of the antebellum period exacerbated the tensions between quality and quantity in the saw gin industry, and pressured gin makers to innovate. Lakwete explains in chapter 6 that low prices made planters and British textile manufacturers demand longer and cleaner fiber with no de-

crease in production. Caught in the middle, gin makers sought to perfect their machines with incremental, conservative changes, usually in the form of “fancy attachments” that were often sectionally distinct (p. 122). Price shocks, such as the panic of 1837, spurred inventors to improve gin speed as well as fiber length and cleanliness. By the 1850s, however, quantity had triumphed over quality and became synonymous, in the minds of planters, with perfection.

To paraphrase Monty Python, the roller gin was not dead yet. Roller gin makers tried to innovate and modernize in the face of the saw gin’s continuing dominance during the 1820-1870 period. A group of predominantly northern gin manufacturers attempted to increase roller gin output for the long-staple cotton market, but failed to maintain quality standards. Other gin makers, located in the South but with “northern roots,” created the McCarthy and cylinder gins in an unsuccessful attempt to compete with saw gins in the short-staple market (p. 148). Lakwete’s analysis in chapter 7 sheds light upon the cultures of short- and long-cotton planters. Many long-staple planters continued to use foot and Eve gins until adopting the McCarthy gin in the 1860s.

The final chapter, “Machine and Myth,” returns to intriguing themes introduced in the preface and mentioned in other chapters. Lakwete argues that the cotton gin was “a site of invention and innovation and a symbol of regional prosperity,” but as the Whitney myth proliferated, the gin “degenerated into a signifier of southern failure” (p. 177). “The narrative begins,” she continues, “with inept planters and sleepy finger-ginning slaves and ends with battlefield dead. It celebrates Yankee ingenuity in invention and victory and insinuates southern incompetence in passivity and defeat” (pp. 191-192). Accounts of the inventor’s life, including a particularly influential one by Denison Olmstead in 1832, fortified evolving stereotypes of “ingenious” northerners and “incompetent” southerners (p. 180). Historians, beginning with James Ford Rhodes in 1893, gave Whitney’s evil gin agency and blamed it for the South’s cotton economy, the reinvigoration of slavery after 1800, and the sectional tensions that led to the Civil War. New South boosters struck back, claiming that the saw gin represented the dead Old South, and the McCarthy gin represented the modern New South, but the failure story, Lakwete documents, has survived to the twenty-first century.

By following the advice of her mentor, George Basalla, to use “things in history,” Lakwete successfully overturns the story of southern failure by recovering

the history of roller gins and southern gins shops (p. xi). Planters, machinists, and African Americans (free and enslaved) were skilled innovators and talented marketers, resulting in technological advances and financial success. Whitney’s invention was an important advance in cotton gin history, but many southerners before and after Whitney played vital roles in the development of the machine. In a direct writing style, Lakwete presents in-depth and wide-ranging research with helpful summaries at the beginning and end of each chapter. She painstakingly explains complicated technological issues, including the nuts and bolts of each machine, while providing the reader with context. This is an important book, and now in paperback form, a good candidate for graduate level courses. As is evident in this reviewer’s attempt to summarize her chapters, Lakwete had her work cut out for her in trying to explain this complex industry and its even more complex machines.

While *Inventing the Cotton Gin* serves as an exciting revision and raises even more exciting questions, Lakwete’s detailed exploration of cotton ginning makes for slow reading for those not technologically inclined. It is understandable that Lakwete should demonstrate the differences between Whitney’s machine and its predecessors and successors, and it is helpful to reveal the evolutions in production, marketing, and the needs of planters. But this reviewer would have preferred less detail and more summary, guidance, and context. Lakwete documents many cases of, and raises tantalizing questions about, southern industrialization, but readers of H-Southern-Industry will find themselves wanting more. Specifically, she declares in the preface that the “innovative southern gin industry belies constructions of failure read back from 1865. Instead, it forces a reconciliation of an industrializing, modernizing, and slave labor-based South” (p. ix). While Lakwete documents such innovation and returns to this theme occasionally, readers may wish for a fuller exploration of context—the cotton gin as “the emblem of the cotton South,” the historiography of industrialization of the antebellum South, and an understanding of the sense of industrial inferiority among southerners (p. 176). This reader would have also enjoyed more discussion about the relationships of the cotton gin to race in the South and Coxe’s new nationalism, and of zones and communities of gin makers to southern industrialization.

Lakwete’s *Inventing the Cotton Gin* is an important addition to the growing list of works on southern industrialization. Her argument that continuity, not the myth of discontinuity, marked the history of cotton gins,

is well documented and has important implications for understanding the antebellum and postbellum periods. Whitney's gin was not a major turning point in American history, or even southern history, but part of a long tradition of innovation and collaboration; innovation by northern and southern inventors and machinists, and collaboration between inventors and planters, blacks and whites, slaves and masters. As with other good history books, it challenges what we think we knew, and sends us searching for more clues.

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