women (their frugality, industry, hopeful outlook, love of family and friends, and sense of social responsibility) are preserved in documents of labor and love.

Quilting gave women control over their material and social lives by enabling them to cope with overwhelming difficulties. In the midst of economic misfortune, Schmeal argues that rural women found time for quilting because it energized them by providing social bonds and a form of material wealth. Quilting helped women meet their own families' material needs or to earn cash. Organized in small support groups, church women also quilted to meet the needs of others.

Schmeal's engaging study chronicles the evolution of quilting in materials, design, technique, and social relations. In the midst of change, however, *Patchwork* is also the story of persistent cultural values. Quilting continues as a social, creative, and economic outlet for Iowans. Quilts preserve identities, are precious family heirlooms, and serve as archives of our state history. Many of the quilts featured in this book can be found at the Grout Museum in Waterloo. In addition to an interesting read, the book is a guide to a valuable collection.

Who Invented the Computer? The Legal Battle that Changed Computing History, by Alice Rowe Burks. Amherst, NY: Prometheus Books, 2003. v, 463 pp. Illustrations, notes, bibliography, index. $35.00 cloth.

Reviewer Brian Peckham is associate professor of economics at the University of Wisconsin–Platteville. His research and writing have focused on the history of technology, with special interest in patents.

Students of Iowa history will likely find of interest this book's meticulous defense of the view, which many experts now accept, that the invention of the modern electronic computer took place over sixty years ago in the laboratories of Iowa State University (ISU). For historians in general the book deserves notice as a convincing demonstration of the value of the voluminous legal documents contained in trial records.

Writing with the authority of an experienced historian of the modern computer industry, Alice Rowe Burks makes skillful use of a variety of evidence to make the persuasive case that John V. Atanasoff, a physicist working at ISU from 1937 through 1942, was the true inventor (with the assistance of graduate student Clifford Berry) of the first automatic electronic digital computer. Most of the evidence Burks presents comes from the mountain of legal documents (primarily testimony and depositions) that piled up during a legal battle thirty years ago in which Honeywell successfully challenged the validity of basic computer patents held by its rival, Sperry Rand.

The judge in that massive infringement action, after hearing 135 days of testimony and reviewing thousands of documents, held in a lengthy opinion that: (1) from 1937 to 1942 Atanasoff and Berry had "developed and built an automatic electronic digital computer for solving large systems of simultaneous linear algebraic equations"; (2) in August 1940 Atanasoff had prepared "a comprehensive manuscript which fully described the principles of his machine, including detail design features"; and (3) the two scientists to which the Sperry Rand patents had been issued, John W. Mauchly and J. Presper Eckert Jr., had derived their ideas from the work of Atanasoff and Berry, whose computer prototype Mauchly had observed (along with studying Atanasoff's manuscript) during a five-day trip to Ames in June 1941. Burks provides a clear explication and a cogent confirmation of these findings of fact. Moreover, she goes beyond the court's opinion in finding that Mauchly and Eckert, in their dealings with the Patent Office and in their trial testimony, were guilty of deliberate deception and intellectual piracy (407).

In addition to clarifying the genesis of the modern computer, Burks has also provided a useful demonstration of the value of legal records (especially trial transcripts) for constructing historical narratives. The nation's courts continuously publish an abundance of authoritative factual findings, which have been generated and tested by the adversarial process of litigation. This mass of information, as Burks shows so well, is a valuable resource for any historian concerned with events that come within the purview of the judicial system.

Unfortunately, as she also shows, such records cannot by themselves impose definitive solutions to historical problems. Burks notes sadly that the enormous record in the case she studied, the product of an investment of countless hours of labor and millions of dollars in what seems to have been an exhaustive search for every bit of relevant information, still has not settled the lingering (and at times acrimonious) controversy over the importance of Atanasoff's early work. This body of evidence of the highest quality has still been open to multiple readings, only some of which agree with the court's opinion. Here is yet another demonstration why historians (as well as social scientists) have so much trouble reaching a consensus on how the past should be interpreted. Even the best and most comprehensive of historical records are inherently ambiguous.

Although Burks shows impressive scholarship in her examination of the origins of the computer, she unfortunately allows her preoccupation with this single question to constrain the range of problems she takes up. Her narrow focus limits the value of her book as a survey of

the early history of the computer industry. It also diverts her from considering a wealth of collateral issues that are relevant to her central concern. Her discussion of the patent battle between Honeywell and Sperry Rand could have been the ground for discussing the meager role the patent system has played in the development of the computer industry. Her one-sentence recognition (412) of the essential role of public financing in advancing that process could have launched a more extensive look at why government planning worked so well in that case but not so well in other similar cases in Europe and, related to that, why the dominant U.S. electronics companies during the 1940s (IBM, General Electric, and RCA) had very little to do with the first generation of U.S. computer projects, which were financed by the Department of Defense and undertaken for the most part in universities. In a book of more than 400 pages concerned with the early history of the U.S. computer industry, one might reasonably have expected that Burks would have given more attention to these important topics.

Furthermore, I regret that Burks's desire to vindicate Atanasoff's claims to *inventive* priority seems to have led her to discount the *innovative* accomplishments of Mauchly and Eckert in taking a special-purpose prototypical computer at ISU and improving it over the next several years to generate an impressive family of pioneering machines: the ENIAC, the BINAC, and, ultimately, the UNIVAC, which, as Burks herself acknowledges (179, 198), was the first general-purpose computer made available for commercial applications. Despite his genius as an inventor, Atanasoff apparently did nothing after 1942 to develop his machine into a marketable product that industry could use. These last steps, so essential to realizing the full value of the computer, were to a large extent the work of Mauchly and Eckert. However dishonorable their earlier conduct with respect to Atanasoff, those moral lapses should not detract from the luster of their later achievements.

On the Farm Front: The Women's Land Army in World War II, by Stephanie A. Carpenter. DeKalb: Northern Illinois University Press, 2003. xvii, 214 pp. Illustrations, tables, notes, bibliography, index. $40.00 cloth.

Most of the books that have been written about the lives of women in the United States during the Second World War have concentrated on women who served in the military or worked in defense-related industries. Little, if any, consideration is given to women who worked as