bind the author’s text to a wide variety of source materials. Further, Reiff ensured that the illustrations are of consistent high quality by not only taking many of the photographs himself but also processing the images in his own darkroom. The author-photographer presents convincing correspondences between bookplate images and photographs of houses by representing the actual houses from a perspective similar to the view published in a pattern book or house catalogue.

Any shortcomings to be found in *Houses from Books* would arise from the fact that the majority of examples of actual houses presented are from a limited geographic area of the nation; houses in eastern states, especially New York, comprise the majority. The author bases his complete documentation and analysis of houses in Fredonia, New York, on an assumption that this community of Americans is probably like most others. Fredonia cannot be assumed to be typical until scholars study other towns and small cities of comparable size and complexity. While this narrow focus may seem a fault of the work, it also provides a stimulus and challenge to others to extend Reiff’s model of scholarship and fieldwork to other American communities. Those architectural historians would do well to model their research after *Houses from Books*.

Fred W. Peterson
University of Minnesota, Morris

Donna J. Rilling

*Making Houses, Crafting Capitalism: Builders in Philadelphia, 1790–1850*


In *Making Houses, Crafting Capitalism*, Donna J. Rilling charts the transformation of the practice of building in Philadelphia from traditional craft methods to a complex industry in the first half of the nineteenth century. The focus of this study centers upon the role of house builders as they participated in a building boom that stretched the city far beyond its original borders. Drawing upon a range of sources including court records, newspapers, account books, and letters of craftsmen, lawyers, and merchants, she examines the bureaucratic requirements for laying out scores of suburban streets and obtaining building permits, re-creates the financial arrangements used to underwrite the construction of thousands of row houses, and describes the strategies for marketing dwellings to lower- and middle-class families. As the population of the city expanded from a little more than 40,000 in 1790 to nearly 400,000 in 1850, the demand for building fluctuated with economic cycles, creating opportunities for spectacular success and precipitous failure for thousands of individuals involved in the construction business.

Developments in the financing of building projects, technological innovations in construction methods and the manufacture of materials, and the changing definition of responsibilities on the building site were not separate events but interwoven parts of a larger story of American business practices in an age of rapid industrialization. This history of building in Philadelphia is an examination of the daily routine of individual workmen as they reorganized the way in which they did business and gambled with their economic well-being in an effort to gain an entrepreneurial foothold in the housing market. Philadelphia’s unusual system of ground rents and easy mortgage credit reduced the financial threshold for those wishing to maintain a mastery of their own fates and enter into the ranks of builders who could undertake multiple building projects. With little capital, craftsmen entered the competitive world of speculative building, erecting one or even a handful of buildings in a single campaign with an eye toward turning a profit that would allow further expansion of business and provide a cushion for hard times. Yet economic downturns, shortages of materials, or bad timing could sink an individual’s dreams and social status. In a series of vignettes, the author traces the fate of a number of craftsmen who flourished and foundered in the uncertain currents that swept through the housing market. Writing from the perspective of a historian, Rilling is less concerned with the product of building—there is little discussion, unfortunately, of house plans and nothing of stylistic matters—than with the manner in which builders responded to economic and technological change. While most historians treat craftsmanship in terms of rising class and political sensibilities, focusing on labor conflicts and worker ideologies, this study emphasizes the career experiences of small-scale builders. It is a welcomed addition to a small body of studies that have analyzed the changing nature of craftsmanship, and it elaborates on many of the same issues addressed in a Southern rural context by Catherine Bishir et al. in *Architects and Builders in North Carolina: A History of the Practice of Building* and from an English perspective by Linda Clarke in *Building Capitalism: Historical Change and the Labour Process in the Production of the Built Environment*.

New technologies and materials in the speculative market required different kinds of labor skills on the job site, reorganized construction methods, and rewarded those who had exceptional expertise or luck in managing an increasingly complex building process. Many with training in the trades left contracting altogether, although some took up the management of materials production, working in lumberyards or brickyards. Though not completely divorced from their workbenches, most master builders who stayed in the business spent their time raising money, casting about for new jobs, ordering supplies, supervising subordinates, finding subcontractors, and placating clients and creditors. Many failed to survive overextended commitments, poor materials, accidents, bad weather, and economic recessions. The amazing thing is that so many willingly entered the maelstrom.

The first half of the nineteenth century revolutionized the practice of building in two ways—specialization and
technological innovation. Many traditional craft roles disappeared and new skills came into demand in response to these factors. Whereas once only a few craftsmen might fabricate and erect the frame of a building and oversee the construction and installation of its finish woodwork, by the middle of the nineteenth century, labor roles had become much more specialized, with hundreds of hands involved in the manufacture of materials in off-site yards and shops and their assembly on the building site. As Rilling reminds us, the archetypical image of traditional construction may not have been typical of Philadelphia in the late eighteenth century, as the process of subcontracting had already become an established part of the building process. Specialization in the woodworking trades predated technological change. The development of steam-powered mass production and a network of supply lines revolutionized the production of materials, reduced or eliminated the demand for skilled labor in some parts of the construction industry, and changed forever the way houses were built. In 1817 a carpenter spent fifteen days planing, mortising, and tenoning floorboards for a modest-sized house. A few years later, a mechanical planer operated by two semiskilled operatives matched the carpenter’s production in a little more than three hours. By the 1850s, the market for the products of mechanized sash and blind factories extended beyond Philadelphia. Manufacturers advertised the shipment of paneled doors, sash, window blinds, and mahogany staircases to many parts of the country, a process that accelerated the diminution of regional building patterns.

Few architectural historians have ventured into this part of the building process, and Rilling’s minute analysis of the production of materials and the changing nature of carpentry, joinery, and masonry is among the best that has been done in this field. As she notes, some traditionally trained craftsmen prospered under these new circumstances, allowing them to double their production with new machines that rendered much of the drudgery of repetitive planing and sawing obsolete. Yet, new machinery and novel methods of organizing the production of materials did not displace traditional handicraft practices when the machinery first appeared in city shops, brickyards, sawmills, and quarries in the second quarter of the nineteenth century. Rilling documents the different speeds in which mechanization affected the processing of raw materials and the production of lumber, mortar, bricks, and marble. The production of marble stairs and mantels from quarries in neighboring counties northwest of Philadelphia became capital-intensive and highly mechanized, and was consolidated in the hands of a few business investors early on, while brickmaking responded slowly to mechanization and remained as late as 1850 a dispersed activity easily accessible to tradesmen who had little capital to invest. Farmers and rural laborers who engaged in sawmilling and lime burning on a part-time basis remained competitive in the supply of these materials to the Philadelphia market throughout the Civil War. Few of these operators invested heavily in new machinery, but continued to rely upon old technologies far longer than other extractive industries.

Some builders decided not to fully mechanize their shops, choosing instead to continue some handwork while subcontracting the production of other elements such as windows and doors to firms that concentrated on a narrower range of work. Even though a number of craftsmen and firms established a place for themselves in the market, the trend in the years before the Civil War was toward greater specialization and mechanization, providing fewer avenues for those who wished to practice a broad range of skills. On the building site, boundaries, which became less permeable with time, appeared, separating for good those who framed buildings or laid masonry walls from those who manufactured the prefabricated component parts. In contrast to the fate of workmen in other rapidly growing cities of the Northeast, who increasingly slipped into wage labor without opportunities for advancement, Rilling argues that Philadelphia’s building system was much more flexible, providing opportunities for workmen to find their niches either as entrepreneurs or as subcontracting specialists even as the industrialization process diminished the need for highly skilled independent carpenters and joiners. Yet the trend toward a hierarchical system, where the many labored at increasingly circumscribed tasks for a few contracting businessmen, was as evident in Philadelphia in the middle of the nineteenth century as it was in New York or Boston and as it would be in small towns and rural areas across the country a generation or two later. In this thoughtful and thoroughly researched book, Donna Rilling has re-created the competitive milieu in which Philadelphia’s craftsmen struggled for higher ground against the slow but relentless flood tide of industrialized building. The fact that a number of them retained their independence for so long is a tribute to their perseverance and a warning for historians who would overlook their achievements in favor of broader trends. The path to inevitability is much more rocky and surprising.

CARL LOUBSURY
Colonial Williamsburg Foundation

Fred W. Peterson
Building Community, Keeping the Faith

Fred Peterson’s Building Community, Keeping Faith, winner of the Minnesota Book Award in 1999 and an honorable mention for the Vernacular Architecture Forum’s Cummings Prize in 2000, is a detailed, fascinating study of one central Minnesota German Catholic enclave. Peterson discovered the Stearns County community of Meire Grove in 1988 when he was doing research for a book on balloon-frame farmhouses in the