BOOK REVIEWS

Gregory L. Heller. *Ed Bacon: Planning Politics, and the Building of Modern Philadelphia* (Philadelphia: University of Pennsylvania Press, 2013). Foreword by Alexander Garvin. Pp. 320. Illustrations, notes, index. Cloth, \$39.95.

Domenic Vitiello. Engineering Philadelphia: The Sellers Family and the Industrial Metropolis (Ithaca, NY: Cornell University Press, 2013). Pp. 288. Notes, index. Cloth, \$35.00.

Urban planning takes many forms. Ed Bacon was a planner by profession, and, as Gregory Heller shows in this sympathetic but balanced biography, Bacon's ideas and plans have profoundly shaped the direction and landscape of Philadelphia since the mid-twentieth century. The industrialists of the Sellers family were not self-conscious planners in the same sense, but, as Domenic Vitiello persuasively argues in an excellent, multigenerational family biography, through their interventions in the economy, investments in the city's infrastructure, and civic leadership, they shaped the future city just as much as Bacon.

In framing his study around two centuries of the same family, Vitiello enables us to see the critical importance of kinship and personal networks in building technical and entrepreneurial skills. He primarily focuses on the careers of Nathan (1751-1830), William (1824-1905), and Coleman (1827-1907) Sellers. From 1682 to 1780 the Sellers family ran mills and wove wire screens and sieves in Darby and Chester County. In 1780 Nathan relocated to Philadelphia and, together with his sons, grandsons, nephews, and cousins, over the next century produced the machine tools and equipment essential to the first and second industrial revolutions. Successive generations operated under various names, but mostly as Seller and Company and then as William Sellers and Company. Throughout the nineteenth century they reinvested their profits in their firms but also in city, turnpike, and canal bonds and in banks to build the infrastructure that solidified the city's manufacturing dominance. The family's interests also included Midvale Steel and Edge Moor Iron Works, among other firms. In the second half of the century William Sellers and Co. was the nation's leading manufacturer of machine tools and power transmission equipment (shaft, gear, and pulleys). It developed interchangeable parts for a wide range of machines.

Sellers firms sat at the geographic and technological center of the city's manufacturing economy. The machine tool works was located in the Bush Hill district (north of Vine Street, west of Broad), which they helped make

PENNSYLVANIA HISTORY

into a global center of machine builders. The industrialists and machine designers all knew one another and shared technical problems and knowledge. They drew on a dense network of highly skilled and well-paid machinists and draftsmen. William Sellers's dominance in machine tools and gauges enabled him to establish the international standard scale for screw threads and to play a leading role in standardizing production practices across all heavy industry. William and his cousin, Coleman, consistently promoted and emphasized research on ways to improve production and products and collaborated with peers throughout the industry. The research they initiated at Midvale Steel on high-quality steel and on worker productivity they turned over to a young engineer named Frederick Winslow Taylor (brother-in-law of a Sellers partner). William and Coleman also made Philadelphia essential to the beginnings of the military-industrial complex. Midvale was the first American firm to produce steel for the new naval fleet. By the 1880s Midvale was the navy's leading supplier of heavy ordinance. Dozens of other local firms produced parts and components for the new great warships, and most of them relied on the machine tools and equipment from William Sellers and Co.

By founding and nourishing the city's key technical and cultural institutions, Sellers men and their fellow industrialists built in Philadelphia what Vitiello calls an educational-industrial complex. In addition to the Apprentice Library, the Social Science Association, and the American Society of Mechanical Engineers, they were among the founders of the Franklin Institute and sustained it as the nation's leading disseminator of technical knowledge during much of the century. They organized and financed the 1876 Centennial Fair that gave pride of place to the city's industry. William, Coleman, and their associate Joseph Wharton were leaders in creating the engineering and business schools at the University of Pennsylvania, both of which contributed to the continued vitality of the city's industrial economy.

Sellers men were also committed to the city and its improvement, which they did define in their own terms. Nathan Sellers served on the city council from 1806 to 1812. William Sellers was an original member of the Fairmount Park Commission. Family members were involved in other good government initiatives throughout the late nineteenth century and fought the machine politicians and the gas—traction—real estate interests that came to dominate city government. In distancing themselves from the corrupt Republican machine, in their constant quest for efficiency and rationality, their nurturing of expertise, their embrace of social science as a tool to address urban problems, their forays into urban development, and their support of

BOOK REVIEWS

a model slum clearance project Vitiello sees the nineteenth-century roots of Progressivism.

Vitiello concludes by using the Sellers' story to argue that the roots of Philadelphia's deindustrialization date from early in the twentieth century. By the 1890s, the Sellers' firms were failing to keep up with new industries and to produce the machine tools necessary for the twentieth century. The next generation of Sellerses sold their interests to national corporations dominated by New York financiers. The Philadelphia works became just branch plants whose owners lacked any particular commitment to the city or its workforce. Eventually the local plants closed. The Franklin Institute became a museum. The University of Pennsylvania lost its earlier links to local manufacturing. Local wealth was no longer committed to maintaining the mission of either civic or industrial leadership.

By the time Edmund Bacon arrived on the scene in the late 1940s Philadelphia's industrial base was already eroding. No one foresaw the extent to which the city's industry would collapse, and no planning on Bacon's part could have saved it. But, as Gregory Heller shows, Bacon possessed three important attributes that enabled him to dominate city planning in the midcentury decades. First, he had a consistent vision for how the city should look and function. Second, he had a strong personality and could tenaciously advocate for his plans. Thirdly, Bacon understood that he needed to work with other stakeholders to build a broad base of support for his plans if he wished to accomplish anything. His achievements came from a combination of a willingness to compromise, a detailed understanding of the policymaking process, and sound political instincts.

As executive director of the City Planning Commission from 1949 to 1970, Bacon was involved, or involved himself, in almost every major project during those years (as well as for some time after): the plan for the Far Northeast, Independence Mall (a federal project), Penn Center, Penn's Landing, Society Hill, Eastwick, the Market East Gallery and commuter rail tunnel, construction of I-95 through the city, and the ill-fated Chestnut Street pedestrian mall. Long after he retired, Bacon spoke up forcefully against skyscrapers taller than the statue of William Penn on City Hall (One Liberty Place [1985] was the first). But Heller also reminds us that Bacon was not the Robert Moses of Philadelphia. Moses had vastly more power in New York than Bacon did in Philadelphia. Consequently, to accomplish most of his ideas, he had to work with the Redevelopment Authority, Public Housing Authority, and local business community.

PENNSYLVANIA HISTORY

The two most prominent and influential projects of mid-century Philadelphia were Penn Center and Society Hill, both largely Bacon's vision, and both drew considerable national attention. Penn Center replaced the obsolete Pennsylvania Railroad station that stood opposite City Hall and the train viaduct, known as the Chinese Wall, that extended westward to the Schuylkill River. Bacon immediately foresaw the importance of a unified development for the site and hoped for an office complex comparable to Rockefeller Center. He convinced the railroad to redevelop it as a single project. The Penn Center story is well known, but Heller, telling it from Bacon's perspective, emphasizes the compromises he had to make along the way. While heralded as a triumph by the press, Penn Center could have been much more, but that wasn't for Bacon's want of effort. In any case, Penn Center was the catalyst for the construction of a host of modern office buildings around City Hall.

In Society Hill Bacon worked to create a centrally located district that would attract middle- and upper-class families to stay in the city. Heller argues that without Bacon it never would have happened. The project had its flaws, and Bacon lacked much sympathy for the poor, mostly African American, population it displaced. Although there is much to criticize about gentrification, Society Hill was the catalyst for the upgrading and gentrification, first in Bella Vista and Queen Village, and then all around the periphery of Center City. In that sense Society Hill was a spectacular success in achieving the goals Bacon had set out for it.

The Gallery and Market East was another long-term Bacon idea. The SEPTA commuter rail tunnel, critical to the whole project, finally completed in 1985, is a testimony to Bacon's prescience and vision. The Gallery has been less successful, and at this writing, its anchor tenant, K-Mart, just closed. The idea of building a suburban mall downtown has not been a notable success.

Like all influential and prominent public figures, Bacon was contradictory and sometimes made mistakes. He long supported a crosstown expressway that would have created an ugly barrier between Society Hill and neighborhoods to the south. Here perhaps was an example of how events passed him by. Heller argues that Bacon had turned against the automobile in the sixties and worked behind the scenes to kill the project. That may be, but given his penchant for speaking up and his reputation, he could have done more to influence highway development. Despite a few missteps, Bacon's enduring legacy left the city far better than he found it.

Both of these books are important additions to the history of Philadelphia and to urban history generally. *Engineered Philadelphia* deserves the attention

BOOK REVIEWS

of historians of technology and of regional economic development as well. Gregory Heller's treatment of Bacon is even-handed, offering perspective and analysis on both Bacon's achievement and flaws. In undertaking this review I was skeptical that the two books had much in common, but in fact they complement each other in surprising ways. It is not just that they were all planners; the Sellers family industrialists and Ed Bacon all believed in Philadelphia and believed it could take charge of its future.

ROGER D. SIMON

Lehigh University

Brian Joseph Gilley. A Longhouse Fragmented: Ohio Iroquois Autonomy in the Nineteenth Century (Albany: State University of New York Press 2014). Pp. 167. Illustrations, notes, works cited. Cloth, \$70.00.

Brian Joseph Gilley's A Longhouse Fragmented is a study of the Iroquois movements from their ancestral home, called the "Six Nations" in New York State, to Ohio where they became the Seneca of Sandusky, through migration to their eventual home in Oklahoma where they became the Seneca-Cayuga of Oklahoma. An ancillary theme of this text is an effort to establish that the Seneca-Cayuga were true Iroquois and not a fragmented assimilated people. Gilley disagrees with the conclusions of most Iroquois scholars on this topic, who say, "Those Western people are not Iroquois as we think of the Six Nations. They have kinship, a longhouse, but they're not actually Iroquois." Gilley's thesis is that they are true Iroquois just like the people of the Six Nations because of their contiguous customs and traditions. He further believes that, tragically, these Western people are ignored by Iroquois scholars.

The intended audience for this book is those scholars whose special interest is Iroquois studies. The author forcefully challenges the claims of the scholars who disagree with him and implies that current Iroquois studies are flawed. He is so confidently adamant in his position that he suggests the possibility of a conspiracy by Iroquois scholars to keep his position from being published.

Gilley may have been better served if he had started this book with a chapter on what made the Six Nations special among Native Americans. He does tell us that their form of democracy was a precursor of the American model, and their innovations in agriculture were highly successful, and their ability