

## *Locating Philadelphia's Water-Powered Past*

In the eighteenth and nineteenth centuries, watercourses were critical to processing and power for manufacturing, and Philadelphia County once had numerous creeks that mill proprietors exploited. A series of scaled surveys undertaken by Philadelphia County officials when new roads or alterations to existing roads were proposed provides visual documentation of the importance of rivers and creeks to early industry. These records, part of the holdings of the Philadelphia City Archives, begin in the early years of the county. Much of the collection predates detailed, large-scale maps and thus is a unique record of the region's development as well as a vital adjunct to textual material such as deeds and newspapers. Captured on a number of surveys are the dams, millponds, and raceways that became the power systems of early endeavors in textile and paper production, among other industries. The plans, drawn by district surveyors, also boast a certain degree of artistry; color washes and outlines or generic sketches of houses, stables, barns, inns, bridges, and the occasional church are common features. Striking on some of the plans as well are the topographical details that signal a county once filled with hills and valleys, its varied terrain making even small rills powerful when water descended. Surveyors mapped the land to facilitate the construction of county infrastructure, simultaneously documenting the landscape that such construction helped to obliterate.<sup>1</sup>

These surveys enable us to tell a richer story about early industry and the ways Philadelphians commodified the landscape near watercourses. Consider the plan done in 1808, when residents petitioned for a road to connect the Falls Bridge over the Schuylkill River to the "old Lancaster road" in Blockley Township on the west bank (Fig. 1). The survey for Falls Road shows the outlines of John Thoburn's mill and tenant houses, as well as the creek adjacent to the mill, the woodlands and meadow areas, and the tracts of neighbors whose

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<sup>1</sup> Road Petitions, Clerk of the Quarter Sessions Court, 1685–1919, RG21:26, Philadelphia City Archives and Records (cited hereafter as Road Petitions). Most files contain the petitions of residents to Quarter Sessions Court to open the road and a report of the jury appointed to view the route and assess damages for taking private property. Where disagreement arose about the need for or the route of the road, or regarding the amount of damages, depositions are also contained in files and reveal additional information about surrounding built structures, topography, and watercourses. The petitions and outcomes are supplemented by the Road Dockets of the court.



Fig. 1. 37-0702, Blockley, 1808, Road Petitions, Clerk of the Quarter Sessions Court, 1685–1919, RG 21:26. Courtesy of the Philadelphia City Archives and Records.

land would also be crossed (or parcels taken) by the road. A subsequent plan of the route identifies the mill as a “calico factory,” the millpond Thoburn had formed by damming the creek now apparent.<sup>2</sup>

Newspapers and nineteenth-century chroniclers help to identify the mill property, its manufacturer, and the goods produced. The structures had been built by entrepreneur John Nicholson in 1794 for a glassworks but had been neglected since Nicholson’s bankruptcy in 1797. A stone mill and fourteen small dwelling houses (visible on the 1808 survey) remained. Thoburn, who had been printing calico since about 1803 on a small creekside property in Darby in Delaware County, leased the Blockley site for a term of ten years beginning in March 1806. The open ground upon which to spread cloth to dry and whiten in the sun, the brook, with sufficient volume to rinse the cloth at each stage of production, and the channel into the Schuylkill River to dispose of refuse bleaches and dyes recommended the property for calico printing. A few months later, when one of the owners died, the premises came up for sale, and Thoburn bought them.<sup>3</sup>

<sup>2</sup>The draft even captures a plan of the orchard and gardens of neighbor George Aston’s country house. Petitions 37-0702, Blockley, 1808 and 37-0711, Road Petitions.

<sup>3</sup>Arlene M. Palmer, “A Philadelphia Glass House,” *Journal of Glass Studies* 21 (1979): 102–14, <http://www.jstor.org/stable/24190039>. For the public sale of Nicholson’s property, see *Philadelphia Gazette*, Dec. 6, 1797. The property ended up in the hands of merchants Philip Nicklin and Robert Griffith, assignees of Nicholson. They seem to have had no tenant until Thoburn. Nicklin died suddenly and intestate in 1806, and the property was put up for sale. *United States’ Gazette*, Feb. 25, 1806; “Act to Authorize the Sale and Conveyance of the Real Estate of Philip Nicklin, by his surviving partner and legal representatives,” Ch. 2819, *The Statutes at Large of Pennsylvania from 1806 to 1809*, vol. 18 (Harrisburg, 1915), 483–86; *Democratic Press*, Dec. 5, 1807; West Park, Title Papers, 1867–ca. 1954, Fairmount Park Properties, box 971, N-5, RG149.6, Philadelphia City Archives and Records (hereafter cited as West Park, Title Papers); Charles Robson, *The Manufactories and Manufacturers of Pennsylvania of the Nineteenth Century* (Philadelphia, 1875), 323.

Although he was printing calico with blocks, Thoburn's Philadelphia rivals used some machinery powered by water, and he likely did the same. The property's fifty acres and the situation of the creek enabled Thoburn to dam the watercourse without flooding adjacent tracts and antagonizing neighbors. Despite the small size of the rivulet (it merited no name on nineteenth- or twentieth-century maps), its descent toward the Schuylkill River gave it a fall sufficient to turn waterwheels. A later survey of the area showed a proposed road in profile, revealing the topography of the stretch.<sup>4</sup>

Access to the Schuylkill River also facilitated transporting his goods to Philadelphia markets and ports, and Thoburn advertised fabrics for sale in the Atlantic Coast's press. He specialized in indigo-blue dyes and other "American" printed calicoes. He also sold bedspreads and shawls "manufactured by John Thoburn & Co." and India cottons that he imported. His ads as well as the city directories noted his mercantile location on North Third Street in commercial Philadelphia but did not mention the mill location.<sup>5</sup> Surveys, therefore, are key in documenting the footprint of Thoburn's manufactory.

In 1813, Thoburn sold the Blockley property to woolen and cotton manufacturer Samuel Winpenny. Thoburn moved to a mill site further up the Schuylkill in Norristown. There he ran his machinery with the power of another creek, this one with "about sixteen or seventeen feet fall," and produced cotton cloth. Unfortunately, the Schuylkill Navigation Company (SNC) dam at Flat Rock flooded the site and reduced the creek water's fall to a mere twenty inches. Thoburn sued the SNC.<sup>6</sup> Chronicler Charles Hagner remarked wryly in 1869, "How Mr. Thoburn came out of this long litigation I do not know, but this I do know, that . . . his attorney, afterwards owned the mill and farm attached to it." In an ironic twist, the corporately controlled waterpower of the SNC made the waterpower of mill sites on tributary creeks "utterly useless."<sup>7</sup>

<sup>4</sup> On block calico printers' use of water-powered machinery, see "Calico Printing Factory," *Aurora General Advertiser*, May 16, 1799; Petition 73–1368, Blockley, 1848, Road Petitions.

<sup>5</sup> Robson, *Manufactories and Manufacturers*, 323; *Washington (DC) Expositor*, Nov. 19, 1808; *Poulson's American Daily Advertiser*, Apr. 12, 1809; Robert Sutcliff, *Travels in Some Parts of North America, in the years 1804, 1805 & 1806* (Philadelphia, 1812), 260; James Robinson, *The Philadelphia Directory, for 1808* ([Philadelphia, 1808]); John Paxton, *The Philadelphia Directory and Register, for 1813* ([Philadelphia, 1813]).

<sup>6</sup> *President, Managers and Company of the Schuylkill Navigation Company v. Thoburn*, 7 Serg. & Rawle 411 (1821).

<sup>7</sup> West Park, Title Papers; Charles V. Hagner, *Early History of the Falls of Schuylkill, Manayunk, Schuylkill and Lehigh Navigation Companies, Fairmount Waterworks, etc.* (Philadelphia, 1869), 59–60. On Samuel Winpenny, see also Philip Scranton, *Proprietary Capitalism: The Textile Manufacture at Philadelphia, 1800–1875* (New York, 1983), 273–74.

On the Blockley site, meanwhile, subsequent owners enlarged the mill-dam and installed or added to the “water wheels, gearing and pipes.”<sup>8</sup> In 1834, William Simpson purchased the establishment and printed silks and, in 1842, added calicoes. Two years later, Simpson expanded the works, and by 1869, when his sons took over, the property “comprise[d] some thirty distinct buildings, and . . . three large reservoirs, fed by a stream of the purest water.”<sup>9</sup> The Simpson factory ran on steam power (though the water wheels were still in place at late as 1876), but water was essential for the boilers to produce that steam. Simpson used creek water as well for processing the cloth and for dousing any fires that might arise.<sup>10</sup>

In 1876 the Fairmount Park Commission purchased the Simpson print works and annexed the property to the West Park. The Simpsons agreed to leave for the park’s use “pipes connecting the dams and leading therefrom into the Schuylkill River”; thus, the mill’s reservoirs persisted.<sup>11</sup> A bucolic urge led 1938 mapmakers to identify them as the Upper and Lower Chamounix Lakes (taking the name from a nearby mansion). But the “lakes” and the creek that fed them soon met their demise with development of the Schuylkill Expressway.<sup>12</sup> If any pipes still remain, they are the only vestiges of the waterpower system that once fueled the site’s manufacturing.

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<sup>8</sup>West Park, Title Papers.

<sup>9</sup>Robson, *Manufactories and Manufacturers*, 323–24.

<sup>10</sup>West Park, Title Papers; Robson, *Manufactories and Manufacturers*, 323–24. Simpson’s substantial factory is depicted in a watercolor by David Kennedy at the Historical Society of Pennsylvania and by a Hexamer survey done probably in the 1860s. *Simpson’s Mill, Falls of Schuylkill* (1834), David J. Kennedy Watercolors Collection (Collection V61), Historical Society of Pennsylvania, available at <http://digitallibrary.hsp.org/index.php/Detail/Object/Show/idno/3106>. Kennedy identifies the sketch as the “south side near the Falls county bridge, previous to locating the Reading Rail Road, Sketched in the spring of 1834 by J. Strong surveyor, and after him by D. J. Kennedy.” The valley to the left of the mill suggests the outlet for the creek. *Wm. Simpson’s Print Works, Falls of Schuylkill 21st Ward Phila.*, in *Hexamer General Surveys*, vol. 2 (Philadelphia, 1866), plate 148, Map Collection, Free Library of Philadelphia, available at <http://www.philageohistory.org/rdic-images/view-image.cfm/HGSv2%2E0148>; and *William Simpson and Sons, Washington Print Works*, in *Hexamer General Surveys*, vol. 10 (Philadelphia, 1875), plates 858–59, Map Collection, Free Library of Philadelphia, available at <http://www.philageohistory.org/rdic-images/view-image.cfm/HGSv10%2E0858%2D859>. This survey captures the terrain of the “Hills” around the mill.

<sup>11</sup>West Park, Title Papers.

<sup>12</sup>Works Project Administration, “Topographical Plan of Fairmount Park” (1938), Fairmount Park Historic Resource Archives, Philadelphia, PA, available at <http://www.philageohistory.org/rdic-images/view-image.cfm/WPA1938>.