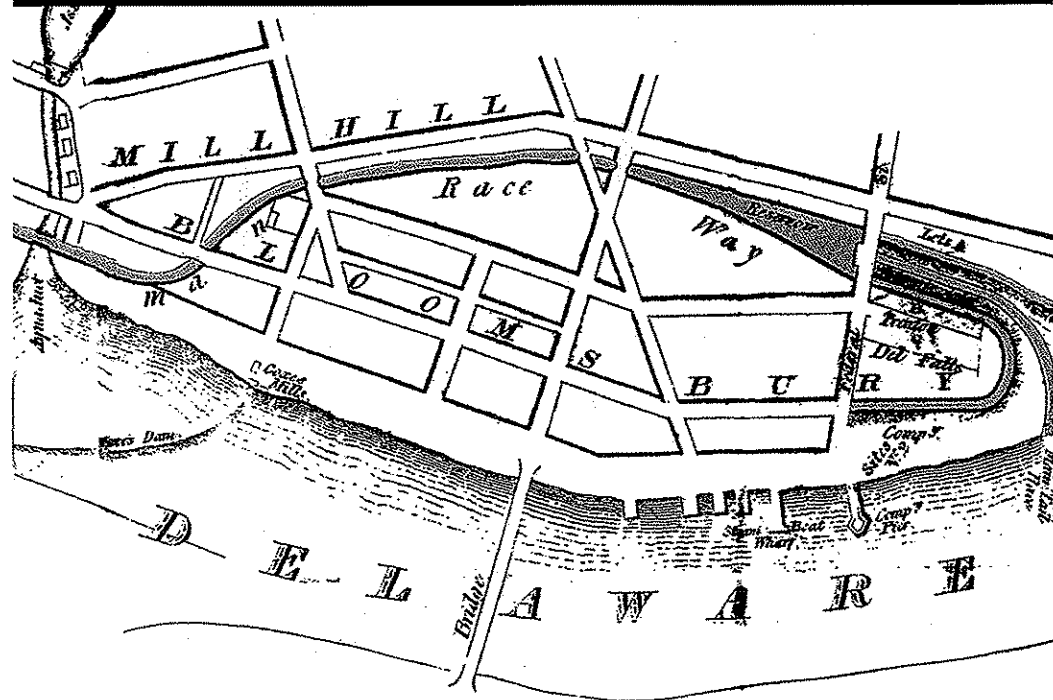


Power to the City

THE TRENTON WATER POWER

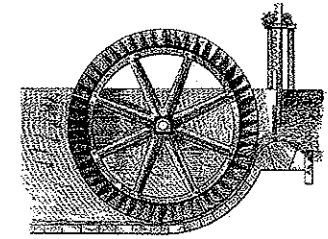


URBAN WATER POWER

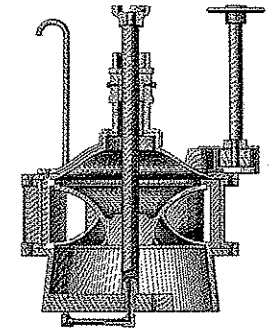
People have been harnessing the power of flowing and falling water for industrial purposes for at least two millennia. By the late 18th century all manner of watermills were in operation around the globe—grinding grain, sawing wood, producing cloth, fabricating metal—to name a few of the more common “milling” actions.

Water power helped propel the Industrial Revolution in Europe, beginning in the mid-18th century, and a generation or so later in the United States. By the mid-19th century ever more complex mechanical systems—notably in textile manufacture and metalworking—were being hooked up to increasingly efficient waterwheels and turbines. Canals followed a roughly parallel development track, peaking as a mode of inland transportation in the United States between the 1820s and the 1870s.

Together, mills and canals brought water-powered industrial development to America’s emerging east coast cities. Large power canals enabled clusters of mills to be developed within riverbank urban settings, where previously only one or two mills might have been sited. Urban hydropower systems were set up along countless New England rivers, the prime example being Lowell’s tapping of the Merrimack. In New Jersey, Trenton’s urban water power was second only to Paterson’s in potency, and was the principal system on the Delaware River. Among New Jersey’s other



Breast waterwheel—a common type of wheel used to transfer the energy of water power to mechanical equipment inside a watermill. [Benjamin Butterworth, The Growth of Industrial Art, 1892]

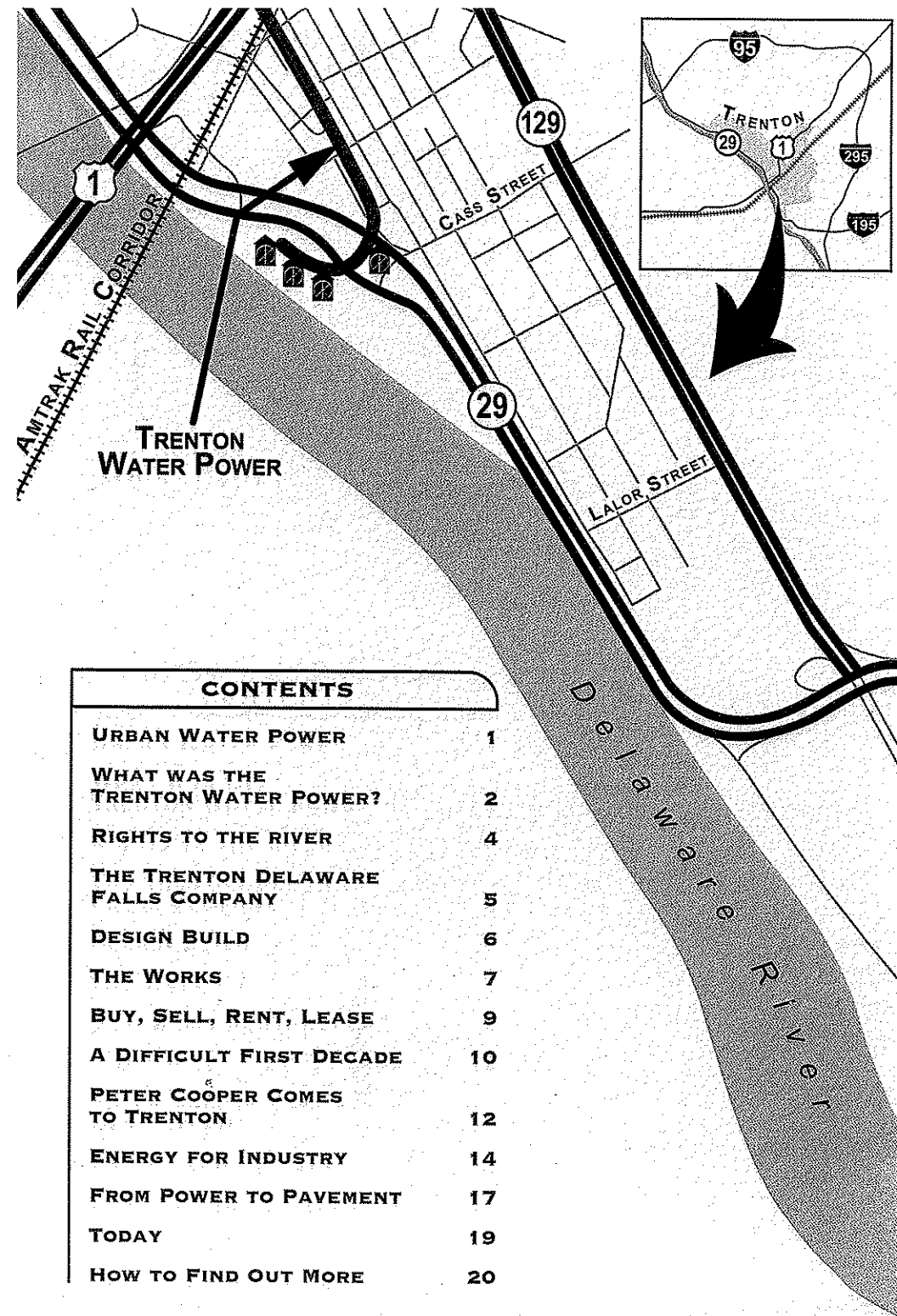


Hydraulic turbine—a rotary engine designed to operate underwater and under pressure; a direct descendant of the waterwheel. [Benjamin Butterworth, The Growth of Industrial Art, 1892]

WHAT IS AN URBAN WATER POWER?

An urban water power is an integrated system of raceways, dams, and flumes feeding a citywide network of watermills.

urban water powers were those in Passaic, Lambertville, Raritan, and Millville.



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WHAT WAS THE TRENTON WATER POWER?

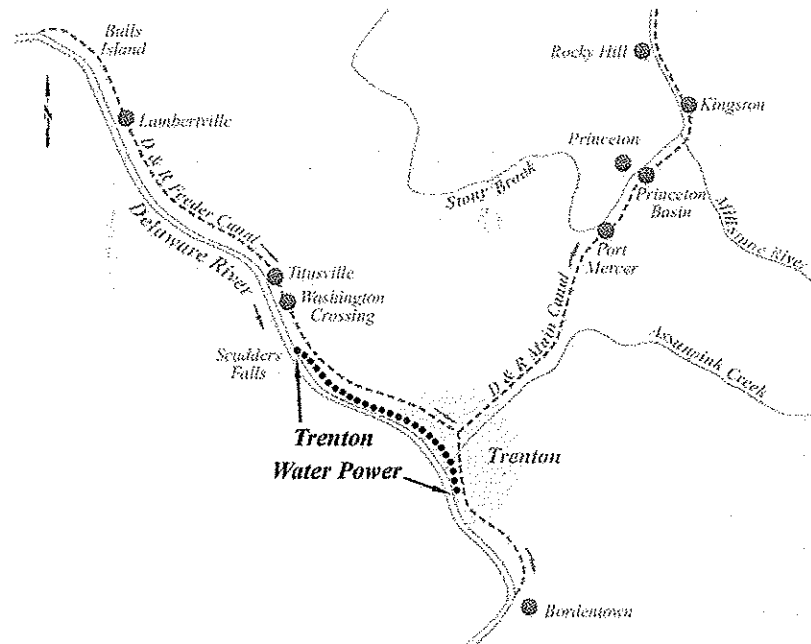
The Trenton Water Power was a seven-mile-long power canal that fueled industrial development along the city's Delaware River waterfront in the mid-19th century. Conceived and built by the Trenton Delaware Falls Company, the waterway was completed in 1834. Mills were slow to appear along its banks and soon had to contend with an economic downturn and floods. Less than a decade after the canal opened, the Trenton Delaware Falls Company declared bankruptcy.

Reorganized by industrialist Peter Cooper and the Trenton Water Power Company in the mid-1840s, the power canal took a new lease on life as the primary energy source for the Trenton Iron Company's rolling mills on the Delaware riverbank at the foot of Federal Street. This enormous factory went on to become one of the main hubs of the Cooper & Hewitt iron-and-steel-making empire (see the companion booklet *Rolling Rails by the River*).

The Trenton Water Power remained under the control of the Trenton Iron Company and its successor, the New Jersey Steel and Iron Company, until 1900. Aside from the rolling mills, close to 20 other mills in downtown Trenton drew water power from the canal. By the 1870s, however, the New Jersey Steel and Iron Company operations were mostly powered by coal-fired steam. The power canal then



Part of Fowler & Bailey's Bird's Eye View of Trenton produced in 1874 showing the Trenton Water Power winding through South Trenton.
[Private Collection]



The routes of the Trenton Water Power and the Delaware and Raritan Canal.
[Hunter Research, Inc.]

entered a period of slow decline, although it continued to service many of the other mills along its course, as well as the city's water-pumping station, into the early 20th century. Beginning at its downstream end, the waterway was progressively filled in between the 1920s and the 1950s and is largely invisible in the landscape today.

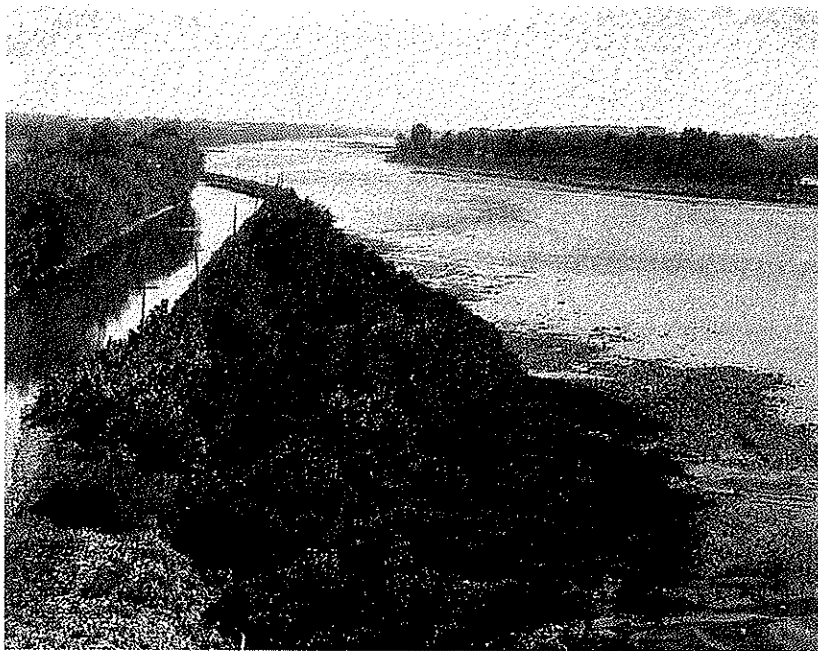
THE TRENTON WATER POWER WAS NOT THE DELAWARE AND RARITAN CANAL

The Trenton Water Power was constructed between 1831 and 1834, the same time span when the Delaware and Raritan Canal was built. The two waterways are sometimes confused. The Delaware and Raritan Canal, most of which still survives today, was primarily a transportation waterway, only occasionally used as a source of water power (as, for example, in Lambertville and New Brunswick). The Trenton Water Power, today buried and built over, was a power canal, always intended as an industrial energy source. The two waterways ran parallel to one another between Scudders Falls and the heart of Trenton, the Delaware and Raritan Feeder Canal flowing at an elevation 20 feet above that of the Trenton Water Power.

RIGHTS TO THE RIVER

Like today, the matter of who could use the waters of the Delaware River, how much, and for what purpose, was a topic of great debate and economic consequence in the early 19th century. Whether the river waters were being plied by boats and ferries, providing a bounty of fish, filling canals, or turning mill wheels, almost everyone along the banks of the Delaware had something different in mind when it came to water usage and, more often than not, something that conflicted with the plans of their neighbors.

Such tensions were also a bi-state concern, with Pennsylvanians and New Jerseyans acutely conscious of their competing interests. Finally, in 1829, the New Jersey and Pennsylvania legislatures appointed commissioners to jointly meet and decide where and how water might be taken from the Delaware for canals and water powers. It was against this background that the Delaware and Raritan Canal and the power canal later known as the Trenton Water Power came into being over the next few years.



Early 20th-century view of the Trenton Water Power (at left) looking downstream from the Reading Railroad bridge over the Delaware River. [Trenton Public Library]

Trenton's power canal was the brainchild of the Trenton Delaware Falls Company, incorporated on February 16, 1831. This entity was granted the right to build a wing dam in the Delaware River anywhere between the mouth of the Assunpink Creek and Wells Falls (near New Hope) and a raceway to bring water power into the heart of Trenton. It was firmly stated that the dam must not "impede the passage of rafts, fish, arks, or boats," although as time would tell, this structure ultimately proved to be a bone of contention among Trenton's industrial interests.

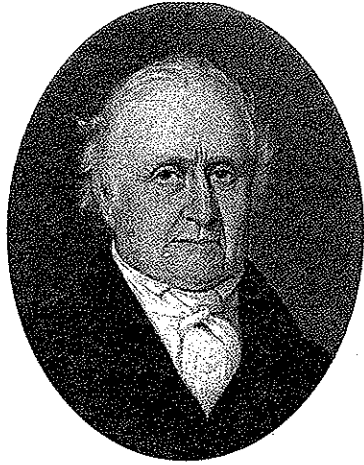
THE TRENTON DELAWARE FALLS COMPANY

When the Trenton Delaware Falls Company incorporated in 1831, construction on the Delaware and Raritan Canal had already begun. Owing to Trenton's situation adjacent to the uppermost section of this canal, water supply was at a premium with no surplus available for powering industrial sites. The city fathers thus pursued a different engineering solution—a separate power canal—to bring water-powered industrial development into the community.

Several prominent Trenton investors and businessmen banded together to form the Trenton Delaware Falls Company. A board of 13 managers was appointed to run the company, among whom were: Charles Parker (a banker and future State Treasurer); Robert McNeely (a former Mayor of Trenton); Philemon Dickinson (son of the Revolutionary War hero of the same name); Dr. John McKelway (a local physician, Trenton postmaster, and mill owner); Thomas Gordon (a Trenton-based mapmaker and preparer of the first detailed map of New Jersey in 1828); Stacy G. Potts (an attorney and New Jersey Supreme Court justice); and Samuel Shreve (a mill owner and past Treasurer of the Trenton Calico Printing Manufactory).

At the time of incorporation the Trenton Delaware Falls Company fixed its capital stock at \$60,000, with a provision that it could be increased to \$200,000. Shares were sold off at \$50 apiece. The company spent the spring and summer of 1831 selling stock, acquiring land, having engineers survey the canal route, and hiring contractors. By the fall, when construction commenced, \$90,000 worth of stock had been issued and the project's estimated cost was placed at \$100,000.

DESIGN BUILD



Benjamin Wright (1760–1842), Chief Engineer for the Erie Canal, also served in this capacity for the power canal of the Trenton Delaware Falls Company.

[Courtesy of the Jervis Library, Rome, New York]

The Trenton Delaware Falls Company hired three highly qualified engineers to design the power canal and oversee its construction. The project's senior engineer was Benjamin Wright (1770–1842), then in the twilight of his illustrious career as a canal designer and builder. Wright was one of America's foremost canal engineers and a seminal figure in the development of the civil engineering profession. He had served as Chief Engineer for the Erie Canal and supervised other well-known waterway construction projects such as the Chesapeake & Delaware, Delaware & Hudson, and Union Canals.

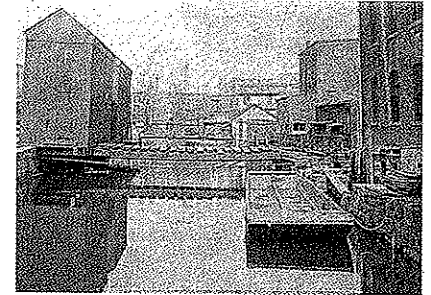
Working alongside Wright were Lieutenant Stephen H. Long, a former Army engineer better known as a bridge and railroad engineer, and Charles Potts, brother of Stacy G. Potts. Long had recently worked on the Baltimore & Ohio Railroad, while Potts had worked as a surveyor under Wright on the Union Canal. Potts, as the junior of the three and a Trenton resident, did most of the legwork for the project, and later served as Trenton's City Surveyor. Construction of the power canal involved dividing the route into 12 sections (11 of them above the Assunpink Creek; the remaining one below), each the subject of a separate contract. The work was performed by local contractors making use of Irish laborers, many of whom likely worked on other Middle Atlantic canal projects.

Construction progressed slowly, hampered by poor contractor performance (some were replaced mid-project), labor shortages (due in part to the cholera outbreak of 1832, which ran rife among canal workers), severe weather (winter ice and spring freshets), and the need to purchase more quarried stone than anticipated. By the time the power canal was completed two years later, the cost of construction had reached almost \$150,000, half as much again as the original estimate.

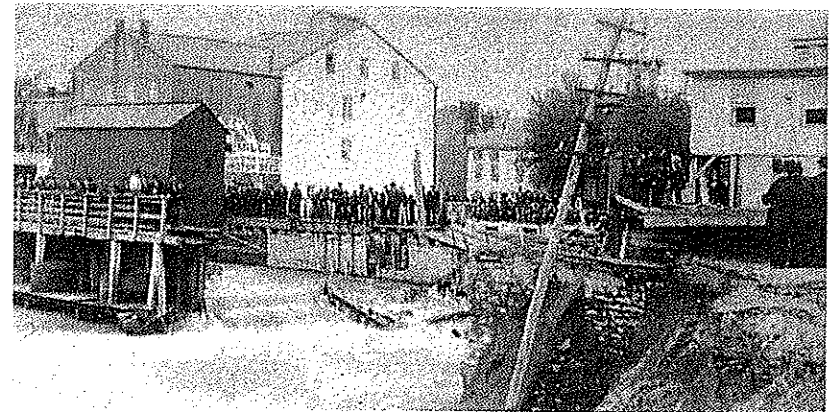
THE WORKS

When finished in 1834, the power canal of the Trenton Delaware Falls Company extended along the left bank of the Delaware River for almost 7 miles. Water was diverted into the canal from the Delaware at Scudders Falls via a wing dam. What the mills did not use was returned to the river via a tail race a mile below the city. The canal was 60 feet wide and 6 feet deep, and the water level dropped only 18 inches between the intake and the mills farthest downstream.

The major engineering feature along the route was an impressive masonry and timber aqueduct that carried the canal over the Assunpink Creek below Warren Street. Mills using the power canal in this section of the city had available a fall of around 14 feet to drive their waterwheels and turbines. At the downstream end, where the canal's overall capacity was around 575 gross horsepower, mills could draw on an 18-foot fall. While the system hardly matched that developed at the Great Falls in Paterson (with its 66 feet of fall distributed among three tiers of mills, each with a 22-foot head, and an estimated 2,350 gross horsepower), it was still easily the largest water power on the Delaware River.

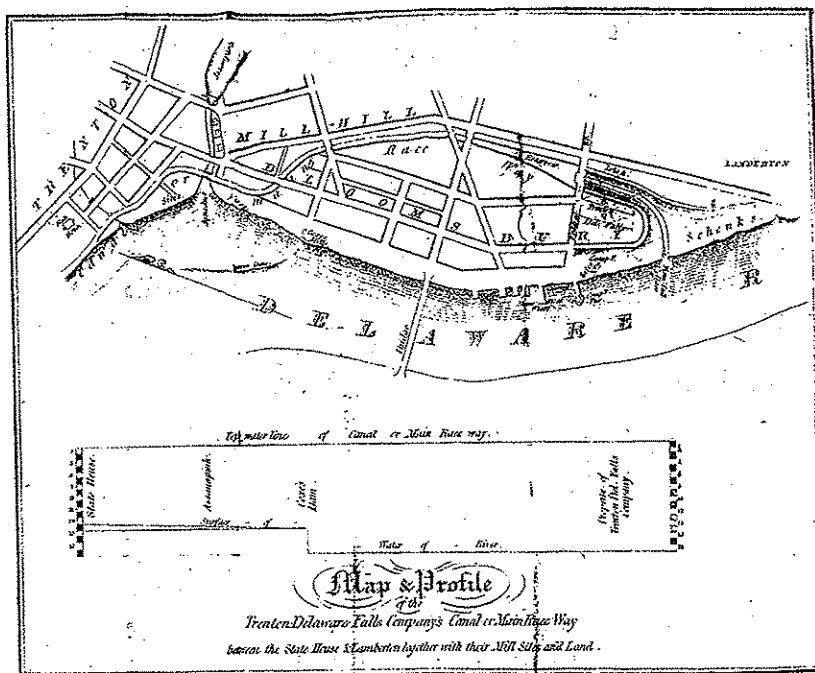


A pair of gatehouses on the aqueduct (at left) controlled the flow of water along the power canal, releasing surplus into the Assunpink Creek below when the water level rose too high. [Trenton Public Library]



Onlookers view the damage from a September freshet in 1882, which blew out the power canal aqueduct over the Assunpink Creek. [Trenton Public Library]

Below the Assunpink, a large reservoir was impounded by Federal Street, providing storage capacity for the cluster of mills that eventually developed at the canal's terminus. An important adjustment to the original design was also made in 1836–37, when a branch raceway was constructed along the Delaware riverbank just below the aqueduct. This raceway terminated at the gristmill known as the Bloomsbury Mill which Daniel W. Coxe had built around 1815 next to today's Trent House (then called Bloomsbury Court). This modification spurred the development of several additional mills along the branch raceway in a part of the city that came to be known as Bloomsbury. Farther upstream, in the section of Trenton known as "the Island," another later addition to the canal was a log basin, used to stockpile lumber *en route* to sawmills in the downtown.



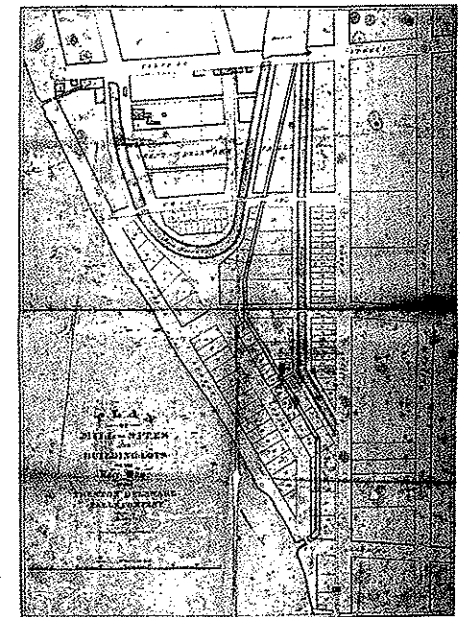
This drawing, produced in 1833 by the Trenton Delaware Falls Company, shows a plan and profile of the portion of its power canal to the south of the Assunpink Creek before completion; the system was eventually constructed differently below the reservoir at Federal Street and a branch raceway was also built to Coxe's Mills and other sites on the riverfront. [Courtesy of Hagley Museum and Library]

BUY, SELL, RENT, LEASE

As construction of the water power neared completion in 1833–34, the Trenton Delaware Falls Company went in search of entrepreneurs and developers interested in building mills and workers housing on its canal-side properties. Mills were envisaged in two main clusters—one around the mouth of the Assunpink (the city's traditional focus of water-powered industry)—the other at the canal's downstream terminus on the former Rosey Hill Mansion property. In the latter area, the company offered no less than "19 mill sites and 77 building lots." Two categories of mill sites were recognized here: one group on the riverbank where the price per site, including water privileges, was \$1,000; and a second group, along Lambertson Street and without river frontage, costing \$680 per site. Ultimately, only four in the first group of sites were developed and full "build-out" was never realized.

PROPOSALS
 OF THE
President and Managers
 OF THE
TRENTON DELAWARE FALLS COMPANY,
 FOR RENTING
THEIR MILL POWER AND LAND,
 IN THE
Vicinity of Trenton,
STATE OF NEW-JERSEY,

TRENTON
 PRINTED BY JOSEPH JUSZICE
 1833.



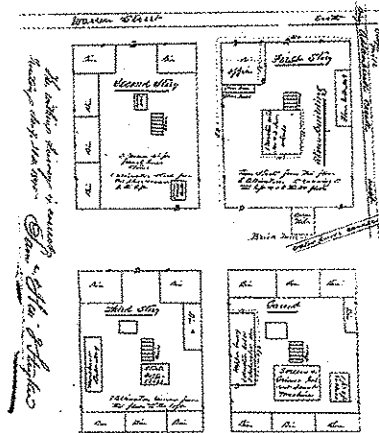
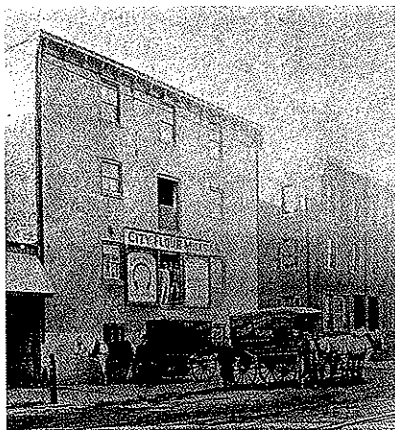
The prospectus of the Trenton Delaware Falls Company, issued in 1833, aimed at promoting mill development along the course of the power canal. [Courtesy of Hagley Museum and Library]

The planned subdivision of land at the downstream end of the Trenton Delaware Falls Company's power canal, as envisaged in the late 1830s; the eastern raceway was never built and very little of the development followed the blueprint of this map. [Research Collections of Hunter Research, Inc.]

Aside from the purchase of land, prospective mill owners were also faced with rental fees. The Trenton Delaware Falls Company proposed charging perpetual annual rents ranging from \$30 to \$50 "for each and every foot front of the company's land," meaning per linear foot of canal frontage. The company also aimed to charge the mills for use of the water brought to their doorsteps, setting the annual rents at \$3 and \$4 per square inch respectively for water used above and below the Assunpink. Numerous other conditions were laid out, concerning, for example, maintenance and repair, and the type of aperture permitted for drawing off water from the canal.

A DIFFICULT FIRST DECADE

The first two mills to be established on the power canal were Dr. John McKelway's sawmill and the merchant gristmill of Samuel S. and Thomas J. Stryker, later known as the City Flour Mills. Both were in operation by 1834 and situated just above the Assunpink close to the site of the present-day Marriott Hotel. By 1837, according to Joseph Potts' *New Jersey Register*, seven mills were drawing water from the power canal at or above the Assunpink aqueduct; two gristmills, two sawmills, a wood-turning mill, an oil mill, and a cotton mill. The Phoenix Manufacturing Company was also constructing a paper mill above the aqueduct, while the Strykers planned to build another mill the following spring.



The merchant gristmill of Samuel and Thomas Stryker, later known as the City Flour Mills: (left) an early 20th-century view of flour-laden wagons on South Warren Street (Trenton Public Library); (right) mill floor plans prepared for insurance purposes in 1845. (The Historical Society of Pennsylvania)

In 1837, below the Assunpink, the branch raceway was about to be built, linking the power canal to the gristmill by the Trent House. The mill and mansion were both now owned by Philemon Dickerson, Governor of New Jersey and a major booster of water-powered industry in Paterson. Five other mill sites were also being developed below the Assunpink. Three were under construction (the calico print works of the Union Manufacturing Company, Samuel Croft's button works, and a mill belonging to John Paxson); a machine shop and another mill of unspecified type were planned for the following spring. The button works was located on the south bank of the Assunpink. The print works was situated at the downstream end of the canal below Federal Street. The other three sites were apparently on the branch raceway.



Philemon Dickerson (1788–1862), New Jersey businessman, politician, and proponent of water-powered industrial development. (State House Portrait Collection, curated by the New Jersey State Museum, SHPC19)

Early in 1837, with 15 mills either operating, under construction, or being planned, the future of the power canal may have seemed rosy. Then, on May 10, the Panic of 1837 hit, triggering a seven-year economic downturn that severely cramped development along the water power. Devastating floods on the Delaware in January of 1841 and the Assunpink in March of 1843 also took their toll, damaging the canal infrastructure and inundating mill buildings. Most mills ultimately weathered the storm, but the pace of new construction slowed and the profitability of the Trenton Delaware Falls Company began to look shaky.

From an engineering standpoint, the most viable section of the power canal lay at the downstream end where the maximum fall and power could be achieved. Yet development along this section of the canal was especially slow to attract investment. Eventually, in 1842, the Union Print Works was joined by a second textile factory founded by the New England Manufacturing Company of South Trenton. A third factory, a cotton mill established by Andrew Allinson, appeared here two or three years later. However, ultimately, it was left to the New York industrialist, Peter Cooper, to realize the full potential of this crucial segment of the canal in 1844–45, as he settled on this spot to engage in the mass production of rolled iron.

PETER COOPER COMES TO TRENTON

Even as mills were gradually taking root along the power canal in the later 1830s and early 1840s, the Trenton Delaware Falls Company was struggling financially. Power usage and rental income lagged behind revenue projections, stockholders saw minimal return on their investments, and the enterprise was forced into carrying burdensome loans just to stay in operation. In February of 1843 the company finally began to unravel when its properties were seized by the Mercer County sheriff against several long overdue debts.

A year later the New Jersey legislature passed an act incorporating the Trenton Water Power Company. On March 8, 1844, Charles S. Olden of Princeton, a Trenton Banking Company director, State Senator, and future Governor of New Jersey, acting as a middleman, acquired the rights and property of the Trenton Delaware Falls Company from the court-appointed receivers for \$50,000. On June 2, 1845, Olden conveyed the same rights and property to the newly constituted Trenton Water Power Company.

These events enabled what now officially became the Trenton Water Power to continue operation under different ownership and management, but they also laid the groundwork for a far-reaching change in Trenton's industrial character. While many of the same individuals who had promoted and supported the Trenton

Delaware Falls Company remained involved with the Trenton Water Power Company, the true driving force behind the revival of the water power was Peter Cooper.

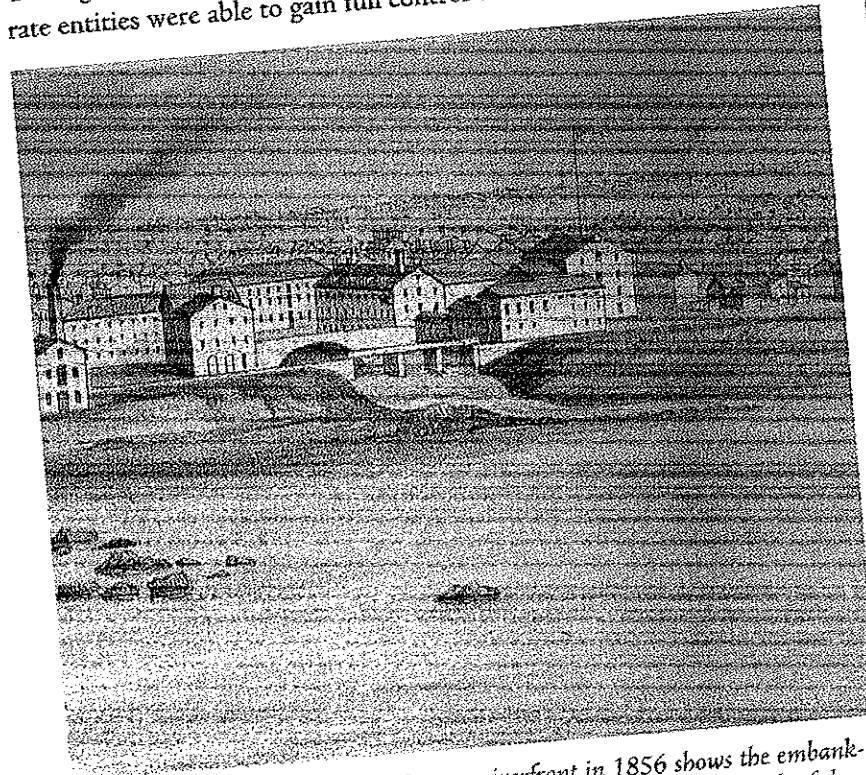
Peter Cooper saw in the partially developed land at the downstream end of the power canal an opportunity to establish a key element in the iron-making industrial process: a state-of-the-art water-powered rolling mill where semi-processed bar iron could be fashioned into beams, rods, plates, sheets, and various other types of wrought iron suitable for use by the nation's metalworkers. A fully functional and economically viable water power was an essential



Peter Cooper (1791–1883), industrialist, philanthropist, and founder of the Trenton Water Power Company and Trenton Iron Company.
[Courtesy of the Cooper Union for the Advancement of Science and Art]

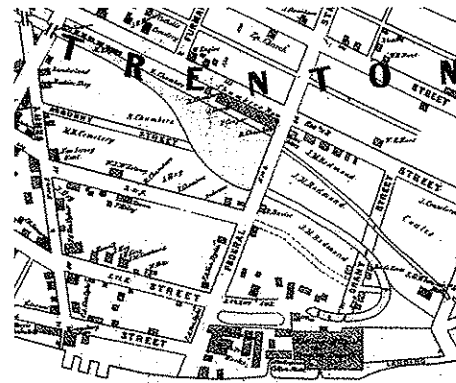
component of Cooper's plans; hence his involvement in the creation of the Trenton Water Power Company. A more extended discussion of Peter Cooper and the iron and steel working enterprise that emerged on the banks of the Delaware in South Trenton is provided in the companion booklet *Rolling Rails by the River*.

On the same day that Charles Olden transferred the rights and property of the former Trenton Delaware Falls Company to the Trenton Water Power Company, Peter Cooper secured ownership of a block of land adjoining the Delaware River below Federal Street along with the rights to one third of the water in the power canal. Cooper also acquired a third share in the ownership of the Trenton Water Power Company, committed to pay a third of the waterway's maintenance costs, and assumed the role of landlord to several other mill owners, agreeing to lease them water for their industrial operations. Through these arrangements, Peter Cooper and his family-run corporate entities were able to gain full control of the Trenton Water Power.



Edwin Whitefield's view of the Trenton riverfront in 1856 shows the embankment and aqueduct carrying the Trenton Water Power over the mouth of the Assumpink Creek. [Trenton Public Library]

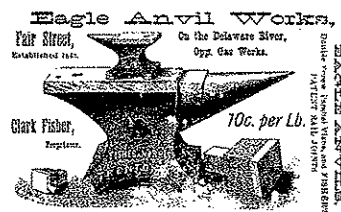
For most of the second half of the 19th century, the dominant factory on the Trenton Water Power was the ironworks below Federal Street. In the spring of 1845, Peter Cooper, his son Edward, and son-in-law Abram S. Hewitt supervised the construction of the first rolling mill and its hook-up to the power canal.



Part of Sidney's map of Trenton, published in 1849, showing the downstream portion of the Trenton Water Power feeding into the Trenton Iron Company and other mills in South Trenton. [Trenton Public Library]

Up until the 1870s, the Cooper & Hewitt companies operating this factory—the South Trenton Iron Company (1845–47), the Trenton Iron Company (1847–66) and the New Jersey Steel and Iron Company (1866–1910)—voraciously tapped the Trenton Water Power, mass-producing iron rails for the railroads, structural iron and steel for buildings and bridges, and iron rod for the city's wire mills. During the Civil War, the Trenton Iron Company retooled to supply gun barrels and artillery carriages to the Union forces.

In the 1850s and 1860s the rolling mills could barely get enough water power to sustain the rapidly expanding operations. Other mills on the power canal complained that the rolling mills were using more than their one-third share of the water and that the Trenton Water



The Eagle Anvil Works was a water-powered factory operating on the branch raceway of the Trenton Water Power in the second half of the 19th century. [Fitzgerald's Trenton Directory, 1881]

Power Company's rental rates were too high. For its part, the Trenton Iron Company sought on several occasions to expand and enlarge the system, receiving the authority to do this in 1847. However, opposition from fishing and navigation interests prevented any substantial reconfiguration, except for the building of a new wing dam in 1852 that allowed the canal to carry 8 feet of water. Even this project met resistance, lead-

Attack on the Water Power Dam.

Stone-hackers finally triumphant.—Information was received in this city yesterday morning early, that a body of stone-hackers and others were going up the river from Lambertton to make an attack upon the dam of the Water Power, at the head of Scudder's Falls. To protect the dam from this threatened attack, a large body of men from the Rolling Mill and other mills were promptly despatched to the spot. The Sheriff of the county, with a number of citizens, also repaired to the place, and when we arrived, which was at 10 o'clock, some four or five hundred persons had assembled opposite the

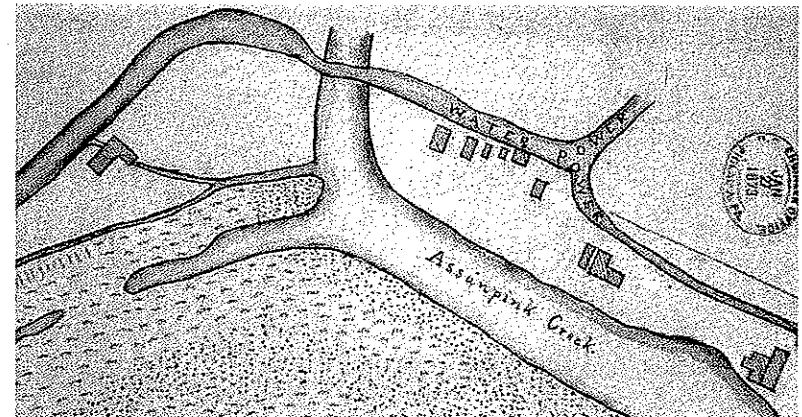
TRENTON, SATURDAY MORNING, AUGUST 7, 1852.

[PRICE—ONE CENT]

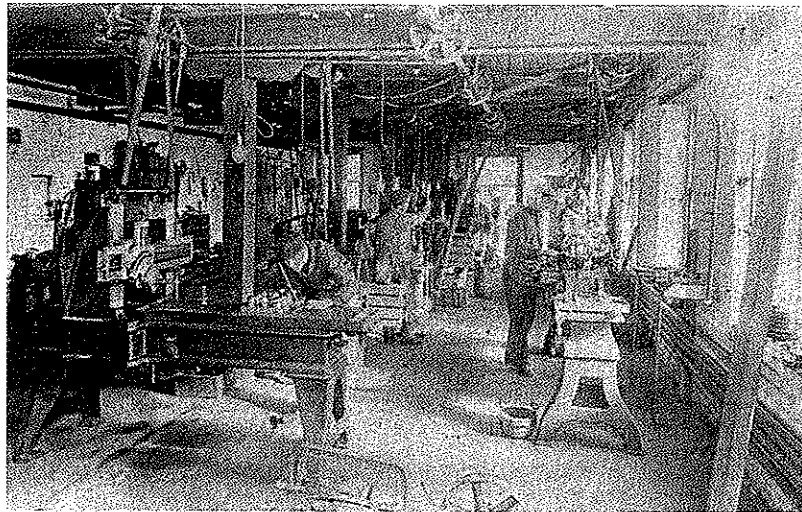
In the summer of 1852, newspapers were filled with accounts of the stone-hackers' war, when disagreement over the enlargement of the Water Power's dam and intake exploded into violence. [Courtesy of the New Jersey State Library]

ing to the so-called "stone-hackers' war" in the summer of that year, when local fishermen and stone-hackers (laborers who mined the riverbed for cobbles) wrecked the dam on at least two occasions.

In 1853 the Trenton Iron Company bought up all the stock in the Trenton Water Power Company to better secure the rolling mills' power supply and facilitate future canal infrastructure improvements. At this time, the water power was still viewed optimistically as capable of generating \$30,000 to \$40,000 a year in rental income, even though only 13 mills were then hooked up to the canal, providing only \$11,000 in annual rents. Before the decade was through, the tune had changed and Abram Hewitt considered Trenton Water Power Company stock largely worthless. By 1862 Hewitt was "quite ready to give up the Trenton Water Power to anyone who will buy it. It is, and has been, and always will be a nuisance."



A portion of a chart of the Delaware River surveyed by the Office of the Chief of Engineers in 1873, showing the course of the Trenton Water Power at the mouth of the Assunpink Creek. [U.S. National Archives and Records Administration]



An early 20th-century view of the interior of the Dennis & Watson machine shop on the Trenton Water Power at Lafayette and Peace streets. [Fitzgerald's Trenton and Mercer County Directory, 1916]

Persistent debt, the need for repairs, complaints from mill owners, and the thwarting of attempts to enlarge the system continued to sour the New Jersey Steel and Iron Company on the water power in the later 1860s and 1870s. By this time the plant below Federal Street was in any case mostly running on coal-fired steam power. A severe flood in 1869 caused such damage to the canal that it took three years to return it to full operation. Nevertheless, the Trenton Water Power Company, although controlled by Cooper & Hewitt interests that had little use for hydropower, was obliged to maintain the canal for all the other facilities along its course. By the early 1870s, aside from the ironworks, there were 19 mills and the City's pumping station (established in the early 1850s) all drawing water from the canal.

Maintenance issues notwithstanding, the Trenton Water Power was already an industrial dinosaur by the 1880s, as factories citywide switched from water to steam power. By 1883 the New Jersey Steel and Iron Company had ceased using water power altogether, and gradually the number of active mills along the canal dwindled. A U.S. Census Office report of 1885 inventoried 15 mills along its course, noting that "[t]he mills can not obtain full capacity, however, during several months, the power sinking as low as one-half at times, so that many of the mills have steam in reserve." By 1891 a statewide inventory of water power listed 12 mills and the pumping station making use of the Trenton Water Power.

WATER-POWERS OF NORTHERN NEW JERSEY—Continued.
Delaware River and Small Branches—Continued.

STREAM	LOCALITY	COUNTY	OWNER	KIND OF MILL	FALL	H. P. UTILIZED		REMARKS
						Net	Gross	
Trenton Water-Power Co.'s Raceway	Trenton	"	City Water Works	Pumping	9	20	27	
Trenton Water-Power Co.'s Raceway	"	"	Wm. Kennedy	{Sawing and planing}	12	40	85	
Trenton Water-Power Co.'s Raceway	"	"	B. W. Tins' Sons	Cotton and woolen	12	25	88	
Trenton Water-Power Co.'s Raceway	"	"	Golding & Sons Co.	Polsters' material	14	37	121	
Trenton Water-Power Co.'s Raceway	"	"	A. Thompson & Co.	Flouring	12	19	24	
Trenton Water-Power Co.'s Raceway	"	"	Nelson Thompson	"	12	12	10	
Trenton Water-Power Co.'s Raceway	"	"	Chas. W. Howell	"	13	80	120	
Trenton Water-Power Co.'s Raceway	"	"	S. Zigonius & Co.	"	12	70	88	
Trenton Water-Power Co.'s Raceway	"	"	Fisher & Norris	Iron works	14	6	10	
Trenton Water-Power Co.'s Raceway	"	"	Phoenix Iron Works	Machinery	14	40	65	
Trenton Water-Power Co.'s Raceway	"	"	Samuel K. Wilson	{Woolen and worsted}	12	100	185	{Partly from Assaupink creek}
Trenton Water-Power Co.'s Raceway	"	"	William Walton	Flouring	17	20	27	
Trenton Water-Power Co.'s Raceway	"	"	Saxony Woolen Mills	Woolen	11	60	75	

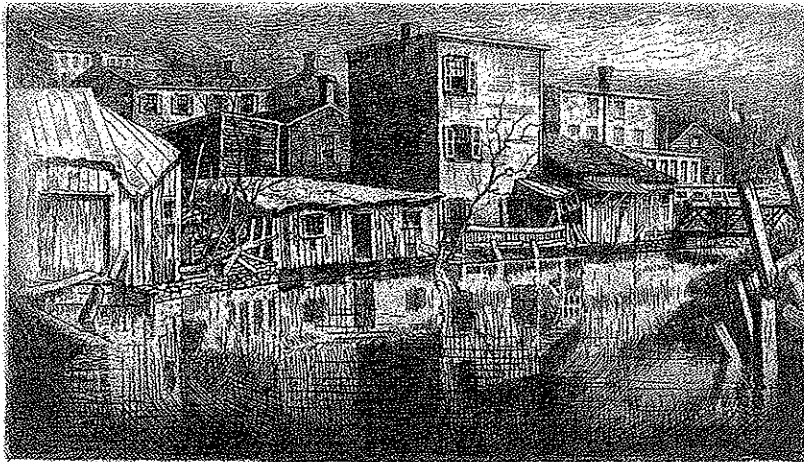
A list of the water-powered facilities on the Trenton Water Power in 1891. [C.C. Vermeule, Report on Water-Supply, Water-Power, The Flow of Streams and Attendant Phenomena, 1894]

FROM POWER TO PAVEMENT

Abram Hewitt tried in vain to sell off the Trenton Water Power Company in 1899–1901. However, it was not until 1910 that the Cooper & Hewitt family interests gave up management control over the power canal, when the transfer of New Jersey Steel and Iron Company property to the American Bridge Company was finalized. By 1910 it is doubtful that any mills were still drawing water power from the canal.



The Trenton Water Power in its recreational phase—boats on the canal near the water pumping station and filtration plant in 1909. [Trenton Public Library]

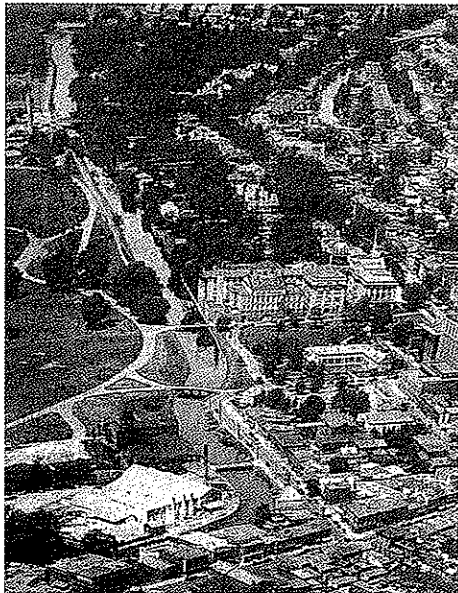


Etching of Power Canal Along State Street, 1915

An etching produced by local artist George Bradshaw in 1915 showing the stretch of the Trenton Water Power that is today the site of the Trenton Marriott hotel. (Courtesy of Thomas Edison State College)

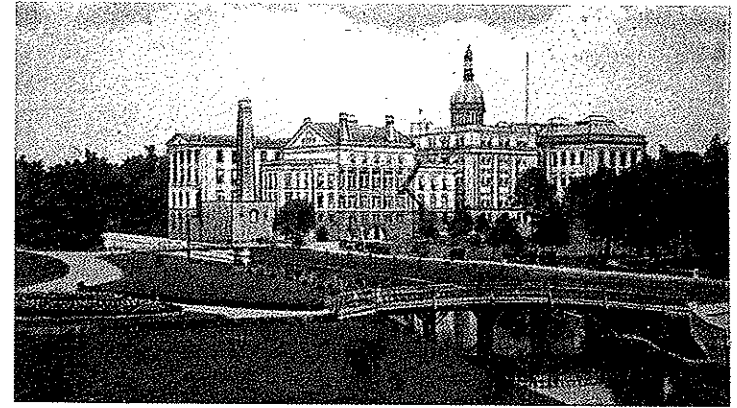
Most of the section of the Trenton Water Power lying to the south of Assunpink Creek was abandoned and filled in during the 1920s. From around 1910 into the 1930s, the segment of the canal extending upstream from the Assunpink to “the Island” became known as Sanhican Creek and was maintained as part of Mahlon Stacy Park, while continuing to supply water to the city’s water-pumping station and filtration plant. By 1940 the water power flowed only as far down-

stream as the filtration plant where it was redirected back into the Delaware via a pair of spillways. Finally, in the early 1950s, the construction of Route 29 along the rest of the water power alignment resulted in the filling of the canal and its almost total removal from the landscape.



An aerial view of the Trenton Water Power passing to the rear of the New Jersey State House in 1925.

(Trenton Public Library)



A postcard view of the New Jersey State House in the late 1920s showing the Trenton Water Power recast as “Sanhican Creek,” a water feature within Mahlon Stacy Park. (Trenton Public Library)

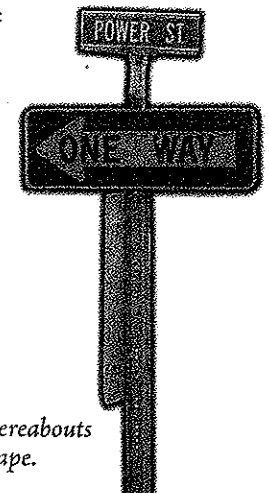
TODAY

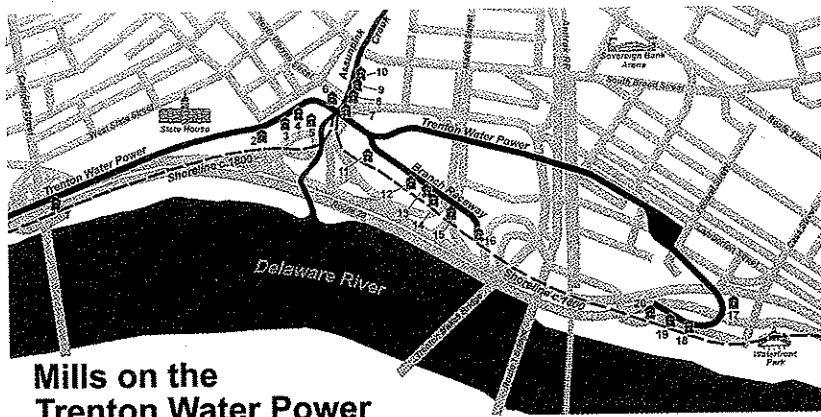
The Trenton Water Power is largely invisible today. Its entire course from the Interstate 95 Scudders Falls bridge to Calhoun Street lies buried beneath Route 29. In downtown Trenton the power canal alignment runs beneath the State Museum Planetarium, behind the State House, and under the War Memorial, the Marriott Hotel, and the Labor and Industry Building. South of the Amtrak rail corridor, Power Street provides a clue to its course en route to the Federal Street reservoir. No obvious surface traces remain of the looping raceway that fed the mills at the canal’s downstream terminus, although a close study of modern property boundaries will reveal parts of its alignment.

There are three locations where more visible reminders of the Trenton Water Power survive: above the Scudders Falls bridge, where the ruins of the wing dam can still be seen, along with the intake and a short segment of the canal; just south of “the Island” neighborhood, where the log basin is incorporated into Mahlon Stacy Park; and at the crossing of the Assunpink, behind the Marriott Hotel, where remains of the aqueduct abutments still clasp both sides of the creek.

A city street sign, one of the few reminders of the whereabouts of the Trenton Water Power in today’s urban landscape.

(Hunter Research, Inc.)





Mills on the Trenton Water Power

- | | | |
|---------------------------------|-------------------|-------------------------|
| 1. Water Pumping Station | 8. Flour Mill | 15. Textile Mill |
| 2. Saw & Planing Mill | 9. Oil Mill | 16. Iron Works |
| 3. Bow Factory | 10. Textile Mill | 17. Textile Mill |
| 4. Bow Factory | 11. Anvil Factory | 18. Iron Works |
| 5. Paper Mill / Flint Spar Mill | 12. Paper Mill | 19. Textile Mill |
| 6. Flour Mill | 13. Iron Works | 20. Textile Print Works |
| 7. Button Factory | 14. Flour Mill | |

HOW TO FIND OUT MORE

Places To Visit

- **Scudders Falls, Delaware and Raritan Canal State Park**, Ewing Township, Mercer County, New Jersey: traces of the wing dam and intake of the Trenton Water Power upstream of the I-95 Scudders Falls bridge.
- **Great Falls Historic District**, Paterson, New Jersey: much of Paterson's urban water power system still survives and defines the city's downtown landscape; one of several remaining mills along its course houses the Paterson Museum, which interprets the city's industrial heritage.
- **Lowell National Historical Park**, Lowell, Massachusetts: America's pre-eminent water-powered textile manufacturing center; the urban water power system and numerous mills have been restored.

Reading Suggestions

- Trenton Historical Society, *A History of Trenton, 1679-1929: Two Hundred and Fifty Years of a Notable Town with Links in Four Centuries*, Princeton University Press, Princeton, New Jersey (1929).
- Louis C. Hunter, *A History of Industrial Power in the United States, 1780-1930, Volume I: Waterpower in the Century of the Steam Engine*, University Press of Virginia, Charlottesville, Virginia (1979).
- Thomas Dublin, *Lowell: The Story of an Industrial City, U.S. Department of the Interior*, Washington, D.C. (1992).

CREDITS

This booklet series is the product of historical and archaeological investigations undertaken for the New Jersey Department of Transportation and the Federal Highway Administration in mitigation of the effects of the reconstruction of Route 29 in the City of Trenton. The preparation of these booklets and other related research activities were conducted in compliance with Federal and State historic preservation laws and regulations. For more detailed technical reporting of the topics addressed in these booklets, readers are referred to the five-volume *Archaeological Data Recovery Excavations and Monitoring, New Jersey Route 29, City of Trenton, Mercer County, New Jersey*, available at selected local libraries, the New Jersey Historic Preservation Office, and the New Jersey Department of Transportation.

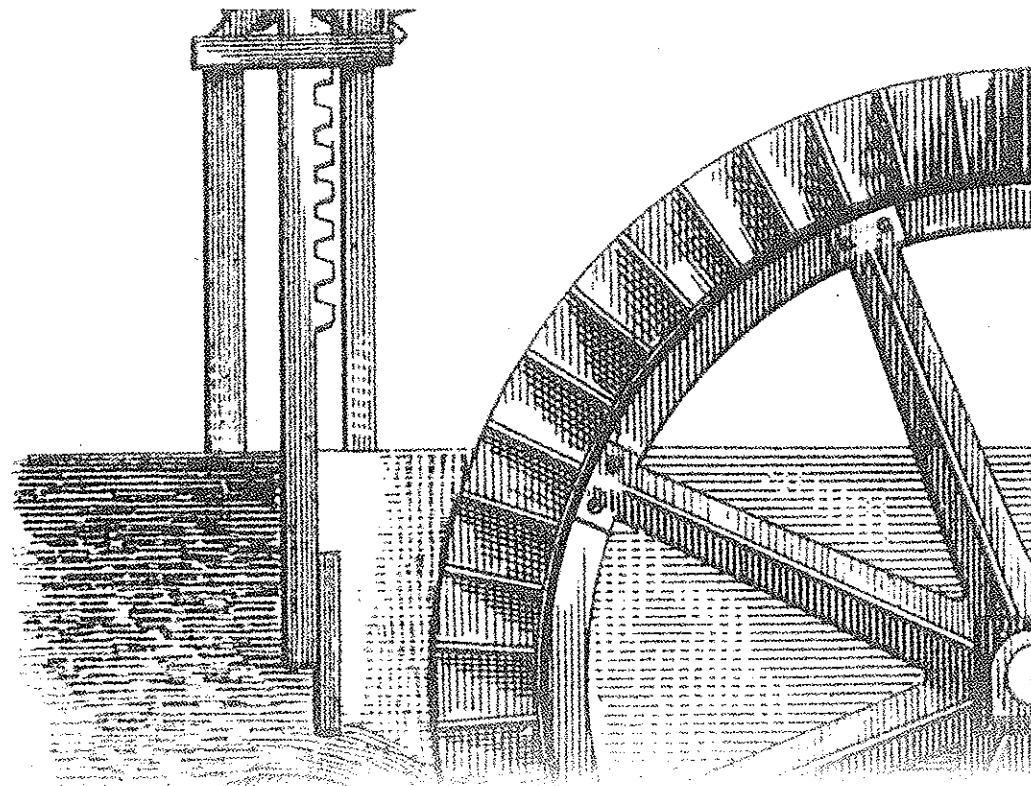
This booklet was conceived and authored by Richard Hunter of Hunter Research, Inc. Janice Wilson Stridick of Wilson Creative provided design and editorial services.

We gratefully acknowledge: David Zmoda, Nicholas Caiazza, Robert Davies, and Kathy Diringer of the New Jersey Department of Transportation (project administration); Damon Tvaryanas, Nadine Sergejeff, James Cox, Richard Hunter, Ian Burrow, Patricia Madrigal, William Liebeknecht, Charles Ashton, and Rebecca White (research assistance) and Michael Murphy, James Lee, Frank Dunsmore, Douglas Scott and Dawn Turner (graphics assistance) of Hunter Research, Inc.; Lisa Smith (graphic design) of Wilson Creative; Wendy Nardi of the Trentoniana Local History and Genealogy, Trenton Public Library; and Sally Lane, Trenton Convention and Visitors Bureau.

OTHER TITLES IN THE HISTORY TRACED BY ROUTE 29 BOOKLET SERIES

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- **A Tale of Two Houses: The Lambert/Douglas House and the Rosey Hill Mansion, 1700-1850**
- **Fish and Ships: Lambertton, the Port of Trenton**
- **Rolling Rails by the River: Iron and Steel Fabrication in South Trenton**
- **Quakers, Warriors, and Capitalists: Riverview Cemetery and Trenton's Dead**

Back Cover (bottom): *Skating on the log basin along the Trenton Water Power in the early 20th century.* (Trenton Public Library)



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