Henry Disston’s Model Industrial Community: Nineteenth-Century Paternalism in Tacony, Philadelphia

In nineteenth-century America paternalism informed manufacturing practices—in part due to the influence of English reformers on American thinking and, more so, due to local circumstances, especially in the early textile industry, which favored a paternalistic model of factory organization. The towns of Lowell, Massachusetts, and Manchester, New Hampshire, were widely reported examples of American industrial paternalism. But such factory organization yielded to market forces soon enough. By the late nineteenth century paternalism recalled a simpler age of mill villages tucked in New England woods along the fall line. Amid the clanging steel and blast furnaces of huge factories with polyglot workforces, paternalism was as outdated as the village smithy under the spreading chestnut tree. Profit-oriented manufacturers ruthlessly exploited workers, and workers responded with violence and strikes. Indeed, during the 1870s and 1880s labor unrest wracked the nation. The 1886 Haymarket bombing in Chicago generated a crisis atmosphere in the country. The
same year in Philadelphia marked the end of four years of conflict between the Knights of Labor and Philadelphia manufacturers.¹

It seemed to many middle- and upper-class observers that labor's interest in wages and management's concern for profits had resulted in a struggle that benefited neither party and drained strength from both. In response to these concerns, Pennsylvania’s Secretary of Internal Affairs surveyed the state for a successful, ongoing, and benevolent relationship between worker and manufacturer that might by example put a halt to this sequence of violence. He found such a model in Tacony, a newly settled industrial community located within Philadelphia city limits. In 1887 the secretary’s report on industrial statistics included a detailed description of a firm owned by Henry Disston in which fair labor practices had minimized conflict and created a model manufacturing village. Disston was the hero of the report. He would provide the model for other manufacturers. His Tacony proved the success of a management system that recognized the need for workers to have a fair wage and steady work, opportunities for mental and moral training, and healthful physical surroundings for their families. The secretary enthusiastically commented:

A visit to this well ordered healthful village, a peep into the homes of the workingmen, an inspection of the factories, the evident attention to light, air and other sanitary arrangements, the fair treatment which the employed has always received, these things must convince the visitor that at Tacony sure progress has been made in solving "the labor question."²

Besides documenting the beneficial working and living conditions of the employees, the report emphasized Disston’s humane treatment


of workers. Disston's management techniques reduced tensions about wage issues and about the potentially disruptive introduction of labor-saving machinery into the factory. Although Disston's workmen had to be convinced of the value of a novel technology, "None of [them] ever destroyed the newly-introduced machine."3

The beauty of the Disston/Tacony model, the secretary pointed out, was that it fostered a natural cycle of growth and profit. Mechanization increased production, which fitted nicely into post-Civil War economic expansion and resulted in a demand for more saws. This in turn perpetuated the cycle of guaranteed work with few wage cuts for the men. Steady wages produced a stable, family-oriented, optimistic working-class community, where men worked and women stayed home with the children. Production increases also benefited society by decreasing prices. The secretary ended by exhorting his readers: "Let the despairing go there if they wish to revive their hopes concerning the future of the working class. As demonstration is better than theory, study the history of Mr. Disston's enterprise and the vision of happier times will appear to you."4 Begun when the ideas of paternalism were popular in America, Disston's enterprise still hewed to these older values. How and why it did so are the principal concerns of this essay.

If ever an institution was the shadow of a man, it was the Disston Company. To know the man is to understand the Disston Company's methods and purpose. Henry Disston was born in Tewkesbury, England, on May 24, 1819. When he was four years old, the family moved to Derby, in Nottingham, where his machinist father, Thomas, found a job manufacturing lace machines. Nine years later, Thomas invented a new machine for making special fine lace. Aware that no product of comparable quality existed at this time in America, a group of British businessmen offered to pay his transportation and share in the potential profits if he would bring the machine to a mill in Albany, New York. Thomas accepted the offer. Lacking the money to take his entire family with him to America, he decided to bring his daughter, Marianna, to keep house and his eldest son, Henry, to act as a machinist apprentice. The trip ended tragically when Thomas died three days

3 Ibid., E25.
4 Ibid., E26, E27, E35.
after arriving in Philadelphia in 1833. The lace machine was taken from the ship and sold to an unknown buyer, and the money sent to his widow in England. The two children were destined to remain in America.5

Friends quickly found Marianna work in a private home, but Henry’s placement was more difficult. There were few machinists in the city, so Henry was apprenticed, for seven years, to Lindley, Johnson and Whitecraft, a Philadelphia sawmaking firm founded by three Englishmen. There he learned about saws and also began experimenting with his father’s craft—machine making. By age twenty-one he had accumulated $350 in savings, giving him the capital to start his own saw business in 1840. Initially, Henry Disston did all of the work himself. He wheeled coal from the Willow Street wharf to his house at Second and Arch Streets and turned the basement into a hardening shop where he made and assembled saws.6

For the first three years business was slow. At the time, Americans preferred foreign-made saws, usually those from Sheffield. Disston found himself making saws three days a week and spending the next three trying to sell them. On Saturday night he delivered orders to the stores, and on Sunday he went to church. In 1844 he rented space and borrowed $200 to outfit a shop with the first steam-powered saw machinery in America. That he could only afford to rent rather than own space proved his misfortune: the lessor had himself leased the building and was behind in the rent. The owner summoned the sheriff and seized all of Disston’s equipment for back rent. Having a few unfinished tools and saws in his possession, Disston finished them in his home and managed to acquire enough money to repurchase his

5 There is no biography of Henry Disston. William Dunlap Disston, Henry W. Disston, and William Smith wrote “The Disston History” (hereafter, “Disston History”), which was compiled by Elizabeth B. Satterthwaite in 1920 and can be found at the Eleutherian Mills Historical Library. For the section about Disston learning his trade from his father, see p. 34. Sketches of Disston’s life include: Annual Report of the Secretary of Internal Affairs; Jacob S. Disston, Jr., Henry Disston (1819-1887): Pioneer Industrialist, Inventor, and Good Citizen (Philadelphia, 1950); and Thomas Scharf and Thompson Westcott, History of Philadelphia 1609-1884 (Philadelphia, 1884), 2267-68.

own equipment. When his new landlord doubled the rent, Disston moved to Third and Arch Streets. Two years later, this landlord also forced him to move, and Disston rented a frame building at Front and Laurel Streets. A fire destroyed this building in 1849. Fully disillusioned with the idea of renting, Disston purchased land next to the fire site and built his first factory.\(^7\)

Disston’s attention to quality made him distinctive among his American counterparts. He used this characteristic to gain the trade of individual hardware men in the neighborhood. A story told of Disston during this early period attests to his willingness to sacrifice profit for quality. Disston personally delivered an order of saws to a hardware store. As he placed the order on the counter, he noticed that one of the blades was soft, and immediately had the entire order removed from the store. The merchant asked him to stop, since he needed saws to sell and some of the saws might be usable. Disston refused, explaining that all of the saws had been tempered together and that he would not risk having inferior saws bear his name. Stories like this—whether true or not—served to make the name Disston synonymous with integrity and quality.\(^8\)

The making of a saw at that time required steel ingots, which were lightly hammered and then rolled into sheets of varying thickness. Saws were cut from this stock. The teeth were hand-punched and holes were drilled for the handle. Americans had difficulty making steel hard enough to bear up under the heat and pressures of sawing. Sawmakers in the United States imported steel from Sheffield, where the English had mastered the technique of using fired clay pots (or “crucibles”) to produce high-quality steel. Disston became the first American saw manufacturer to bring steel workers from Sheffield and open a crucible mill in 1855. This experiment with crucible steel did not mean that Disston discontinued the use of English steel. On the contrary, an English steel agent noted in 1867 that Disston “has long

\(^7\) “Disston History,” 35-37.

\(^8\) Paul W. Morgan, “The Henry Disston Family Enterprise I,” *Chronicle of the Early American Industries Association* 38 (June 1985), 18. Stories of this kind were commonly told about successful men in Disston’s day, illustrating the maxim that hard work, honesty, and virtue would be crowned with success.
made steel for large saws. Circulars he buys Jessop's [in Sheffield]."

In 1859 Disston had 150 men working for him, more than any of his competitors: Walter Cresson's Saw of Conshohocken, William Rowland's Saw Works in Cheltenham which produced the first American-made saw in 1802, and William Conaway's Saw of 402 Cherry Street. To gain an edge over these competitors, Disston used his family connections in England to keep him abreast of trends in steelmaking. His machinist brothers were able to acquire the use of John Sylvester's patented process for tempering and restoring the shape of scraps of hardened steel. Sylvester had invented a large press that used a turn screw to compress heated steel scraps into ingots. Disston had the device brought to America and began to save the unused steel cuttings from his saws. This cost-saving technique gave him an advantage over other saw manufacturers, who were still sending their scrap metal back to England to be remelted. His recycling method yielded steel faster and cheaper.  

Not to be outdone, Disston's competitor Walter Cresson began using Sylvester's process—evidently, without the inventor's permission. In 1857 Disston brought suit for patent infringement on Sylvester's behalf before the Circuit Court of the United States. Sylvester remained in England throughout the two-year court battle, which Disston aggressively pursued. Cresson's defense was that the process had been used extensively in England prior to Sylvester's patent from the Crown. Therefore, he argued, the process was in the "public domain" and could be used by anyone. As the case dragged on, it became apparent to Disston that the best method of protecting new devices and processes was to keep them secret.

Despite Disston's inability to protect Sylvester's patent, few manufacturers could match his line of saws, either in quality of manufacture or in quantity of styles. His first catalog in 1855 listed twenty-one

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different saws, four types of knives, trowels, gauges, slaw cutters, many kinds of springs, steel blade squares, and bevels. Six years later Keystone Saw Works was described by the Philadelphia Press as the biggest saw factory in the country.\(^{11}\)

Throughout the 1860s Disston found himself with back orders, because he did not have enough skilled workers. There was always work for newly arrived skilled craftsmen from other U.S. cities or from Europe and England. One example of how fast an experienced craftsman could get work was recounted in the Disston Crucible by Fred Smith. He was an apprentice at a saw works in Albany, New York, when it was closed because of a lack of orders. After signing some papers, Smith was given his freedom and the next day set out for Philadelphia. On Monday morning, March 10, 1861, he arrived at the old Kensington railway station and asked the way to Disston Saw. As he walked toward the factory, a chance meeting with David Brickley, Disston’s contract-maker for all long saws, got him the job. Smith rented a room and, though tired from the long trip, was at work by twelve o’clock the same day. Henry Disston stopped by within the hour to welcome him to the firm and nicknamed him “my runaway apprentice.” The smallness of the firm at this time allowed Disston the opportunity to practice a “face-to-face” paternalism. By April 1861, however, Disston had employed some seventy-five men in his saw works, thus creating one of the largest industries in the city and making face-to-face paternalism less effective.\(^{12}\)

The Civil War offered Disston the greatest opportunity for expansion. The need for war supplies such as sabers, bayonets, knapsack mountings, and guns gave him diverse orders to fill beyond the continuing demand for saws. The Morrill tariff of 1861 added to Disston’s profit margin by placing import taxes on iron entering the country. Those sawmakers who had not built their own steel mills were virtually put out of business by the Morrill act. In 1863 Disston began making steel plate for the navy. With each ship on the blockade line needing steel plates, this was one of Disston’s largest war contracts. He built a


\(^{12}\) Disston Crucible: A Magazine for the Millman, April, 1919, pp. 42-43.
rolling mill to accommodate it. As orders increased, so did profits, and for the first time Disston earned enough capital for expansion.13

The backbone of the operation remained Disston’s passionate search for machinery that increased production without diminishing the quality of the product. He encouraged everyone around him, in words and actions, to use their brains to improve the machines and the tools sold. Saws were manufactured in every conceivable way that would sustain superiority in shape and teeth. In the late 1860s, Disston produced inserted-tooth saws; later, cross-cut saws were designed with raked teeth, making them by far the most effective saws used in American lumber camps.14

Disston’s penchant for keeping up with the latest developments in manufacturing is illustrated by his collection of “Patent and Design Drawings of Saws, 1835-1875.” His organizational ability and thoroughness are evident in these manuscripts. He methodically collected patents on saws, analyzing and commenting on each patent. He learned the different types of saw blades that cut a variety of wood products. He knew the names of the patent holders and easily accessed them for permission when special saw orders were received for specific products. In all, his records contain well over one hundred different types of saw blades during this forty-year time span, a tribute to what might be called today an effective research and development department.15

The making of handles was upgraded as a result of Disston’s visit to Paris in 1865. Hearing of a superior saw, he visited the factory and purchased two band saws. The key to the operation was the speed of the revolving saw. At first, the men in Disston’s factory were fearful of using it lest the three-eighths-of-an-inch steel blade break and injure them. To show that the new machine could be used safely, Hamilton, Henry’s eldest son, operated the first band saw set up in the factory. Disston prevailed, and the new saw dramatically increased the produc-

14 Tweedale, Sheffield Steel, 147-48. Tweedale warns that “technological sophistication of the American saw industry must not be exaggerated.” Smithing, for instance, never became mechanized, and skilled workmen were always part of the workforce at Disston.
tion of saw handles, from 20 dozen a day produced by one man to
165 dozen a day produced by two. 16

The story of Disston's discovery of the skewed-back saw typifies his
inventive style. Early one morning in 1873, Disston sought out plant
superintendent Albert Butterworth. "Al," he said, "I'm not satisfied.
There must be some other way to still improve the handsaw. Why last
night, I was going over the history of Egypt and Rome, and from
some of the illustrations the shape of the saw blade today is about the
same as then. I've been thinking about it all night. Get a piece of
chalk. Now, draw a handsaw blade down there." Butterworth drew
the blade on the floor and Disston knew instantly what he wanted to
change. "See? There's more blade there than is required. It's too wide.
. . . Just cut a section of the back . . . [and] curve it." Butterworth
did as he was told, and the company had a new product that required
less steel in production and functioned better for sawyers because it
was light and had less blade friction. 17

But it was more than inventiveness that kept Disston in the van-
guard of the saw business. Disston began using new, sophisticated
advertising techniques that were far superior to those used by competi-
tors. As early as the 1870s, he purchased eight pages in Iron Age to
publish over one hundred wood engravings of his tools. No competitor
ran similar ads until later in the century. 18

Each innovation brought with it the possibility of legal action. One
case charged Disston with patent infringement, and he himself brought
five cases against competitors. The most unusual case involved Dis-
ton's trip to Toledo, Ohio, in spring 1874 to look at a saw-grinding
machine operated by David M. Mefford. Expressing his admiration,
Henry asked Mefford to bring it to Philadelphia for use in his factory.
A deal was struck, and Mefford came to Disston Saw, set his machine
up, and had it working. Mefford was astonished the next day when

16 Morgan, "Family Enterprise I," 18-19; Henry Disston & Sons, Disston Lumberman's
17 Disston, Henry Disston, 19; "Disston History," 21-22, 39.
18 "Private Ledger Book No. 2," p. 263 (Disston R.A.F. Industries plant, Longshore
Street and State Road, Philadelphia). A listing of advertising for Henry Disston & Sons for
1884 shows twenty-four forms of newsprint used by the firm. The largest payment of $1,860
went to Iron Age and the second largest of $625 to the Mexican Financier.
Diston saw smithers and holders pictured at Diston's Laurel Street site in 1869. Note that the smithers are holding long strips of steel used to evaluate the flatness of the steel surface. Both holders and smithers have canvas protective flaps over their aprons to protect them from the sharp edge of the blade during the leveling and tensioning process. Courtesy of the Atwater Kent Museum.
he was served with a patent fraud complaint signed by Henry Disston. Disston not only had Mefford in a court in his district, but he also had the machine.\textsuperscript{19}

By the 1880s, machines had replaced many of the old hand processes. Hand-saw teeth could be cut out at a rate of 500 a minute by a revolving cutter. Disston's Keystone Saw Works now took less than two minutes to complete a hand saw with 115 teeth. The circular saw machinery was equally efficient. One man on a circular saw-grinding machine could produce six saws to every one produced by the old hand methods, and with fewer imperfections. Similar machines for hardening, tempering, and filing made Disston's plant one of the most productive in the world.\textsuperscript{20}

Family relationships are another key to understanding the company's growth. The death of Henry's father forced older brother William (1820-1872) to remain behind in England to care for his mother and younger brothers and sister. Younger brothers Charles (1823-1898) and Thomas (1832-1897) and sister Susan (1826-1898) came to America in 1846, and the brothers immediately went to work in the saw factory. William remained behind in England, ready to give Henry whatever information he needed about steel processes or the new machinery that was then appearing on the European market. It was not until May 1868 that William migrated with his family, which included his son Henry (1845-1920), with the express purpose of founding a jobbing shop. The shop was organized to fill special requests for tools or other steel products. It functioned very much like an experimental or developmental laboratory. The value of the shop to the firm is demonstrated by the listing of Thomas Disston, longtime subpartner in the shop, on twenty-seven of the company's forty-four patents.\textsuperscript{21} The English connection continued when William died in

\textsuperscript{19} "United States Court for the Eastern District of Pennsylvania, October 1874," Equity Case 113, Disston v. Mefford (National Archives, Mid-Atlantic Branch, Philadelphia).
\textsuperscript{20} Tweedale, \textit{Sheffield Steel}, 150, 175.
\textsuperscript{21} Paul W. Morgan, "The Henry Disston Family Enterprise II," \textit{Chronicle of the Early American Association} 23 (Sept. 1985), 42-44; Morgan, "The Henry Disston Family Enterprise III," ibid., 23 (Dec. 1985), 68; Disston, \textit{Henry Disston}, 8. Jacob Disston writes proudly of Henry's English heritage: "In a sense, we can recognize in the story of this man's, Henry Disston's, career a link between England and United States. He well may symbolize for us a life that continued in this nation the heritage of British workmanship, character, fair play and human tolerance." "Disston History," 68-71. These partnerships were part of Henry Disston's pattern of familial benevolence toward his brothers and wife. As each of the men
1872. Henry, his son, returned to England two years later and remained there for twenty years as a salesman of tools and recruiter of personnel for the Disston factory.

Besides technology and skilled workmen, the Disston family also brought the Victorian English belief in “patriarchal principles” with them to America. Skilled steel smithers were being sought by the newly emerging steel industry of Pittsburgh as well as by Disston. To gain an advantage in recruiting these skilled workers, Disston offered them a better way of life. Disston would find a way to promote stable family life and at the same time produce a profit in his factory. Disston recognized that this would have been difficult to accomplish in the crowded and poor Kensington district in which his factory was located. He believed that if the plant could be moved, property ownership could be used as the basis for promoting a paternalistic community in which worker and company could both benefit.22

Seeking better personal relationships between worker and owner through property ownership became the hallmark of the paternalist in the mid-nineteenth century. But it was not only ownership that defined paternalism. Intrinsic also were the concepts of responsibility and mutual benefit. The maxim “property has duties as well as rights” is borne out in the life of Henry Disston. Duty required conscientious paternalists to rule, guide, and help those beneath them in the hierarchical structure. In Victorian England industrial paternalists were called upon to prevent disturbances and social disruption by guiding the lives of those dependent upon them. To the English, paternalism worked best in small units or in a reasonably isolated context, not in a sprawling metropolis.23

Henry Disston adapted these beliefs to his own circumstances. Paternalistic and religious beliefs based on Presbyterianism had led him to set aside sums of money yearly for charitable purposes. Among the projects was a private dispensary, where all the poor of Kensington, as well as Disston’s workers, could get free medical treatment. During severe business depressions, when unemployment was widespread in

died, the partnership was bought out by Henry Disston & Sons, with the final buying out occurring in 1899.

22 Morgan, “Family Enterprise II,” 43.
the neighborhood, he maintained a soup kitchen for the hungry and the jobless. Most importantly, the capital accumulated during the Civil War allowed Disston to invest in real estate. In 1870 he purchased substantial land holdings in the area that was to become Atlantic City. To provide lumber for the development of the resort, Disston built a large saw mill at the site in 1872, spurring the building of homes, hotels, businesses, and boardwalks. Disston built himself a large home that became a showplace on the New Jersey shore. Family remembrances tell of his motivation for these investments, which were not just for profit but rather to provide the ordinary people of the city the opportunity to vacation at the seashore. Land was sold and profits realized by Disston, but his dealings were characterized by a fair price and a comfortable residence.\footnote{24}

A second real estate purchase grew out of Disston’s concern for the living conditions of the men in his factory at Front and Laurel Streets. The plant was located next to a stable in a congested area. The neighborhood was smelly and dirty, the water was impure, and everyone crowded into small row homes.\footnote{25} The crowded and unhealthy conditions surrounding his plant convinced Disston that more needed to be done to improve the lot of the workers. Land ownership and a country setting, as advocated in England and previously established in New England, seemed to offer the best solution.\footnote{26}

After considering a number of sites, Disston settled on purchasing land in a small hamlet on the Delaware River in the northeast section of Philadelphia. This area had been described in 1679 as a “village of Swedes and Finns on the west bank of the [Delaware] river.” It was composed of farm land, until factories along the Pennypack Creek provided the population for the village of Holmesburg. Tacony came into being during the early part of the nineteenth century with the building of the Buttermilk Tavern on the Delaware River. Tacony in

\footnote{24} Disston, *Henry Disston*, 23. The financial records of the Henry Disston Estate in 1883 indicate that there were three mills in Atlantic City owned by his wife. The profits exceeded $10,000 for the year. These records also list rents and property purchased by Henry Disston in Atlantic City and Tacony. Read “Henry Disston’s Atlantic City Book” (Atwater Kent Museum); “Private Ledger Book No. 2,” p. 72; “Disston History,” 18.


\footnote{26} “Disston History,” 18-19.
this period was a summer vacation spot for Philadelphians and farmers of the area. The initial attempt to connect Tacony with the city occurred in 1846 when William H. Gatzmer secured a charter for the Philadelphia & Trenton Railroad. The people of Kensington refused to allow the railroad into the city, making Tacony the terminus. Passengers going to the city left the train at the Delaware River and what is now Disston Street and took a boat to the Walnut Street wharf. A railroad hotel was built to accommodate the passengers, and a small community composed of steamboat workers and railroad men quickly took shape.\textsuperscript{27}

Henry Disston first visited Tacony when his brother Thomas purchased a number of lots from the Tacony Cottage Association in July 1855. The Tacony Cottage Association was a private group that had arranged a speculative land deal to support the building of St. Vincent's Catholic German Orphanage. The Association purchased two farms totaling forty-nine acres at a cost of $19,000 and divided half of the land into vacation cottage lots. Sale of these lots allowed the Association to recover the purchase price and build the orphanage on the remaining land. Thomas built a summer home on what was described as one of the most beautiful and healthy spots along the Delaware. Easily accessible by steamboat or train, the area was used by the Disstons for summer vacations prior to the founding of Atlantic City. Fish were plentiful in that area of the Delaware, and the nearby transportation made it a short trip to the city. Eventually, Henry Disston purchased a six-acre lot that included the Buttermilk Tavern.\textsuperscript{28}

Two important features prompted Disston's purchase of the terminus. First, the location had two major sources of transportation. The Delaware River, with a dock already in place, was ideal for movements of coal and iron ingots. The train provided a means of transportation to the West, where saws were in continuous demand. Second, the


purchase of one farm site could be followed by additional purchases (as indeed it was) at a low cost per acre.

There was one element still needed before Disston could consider moving his factory to Tacony—a skilled labor supply. One had only to look at this sleepy farming-fishing village and home of a few railroad workers, some watermen, and random steamship employees to realize that the local population could not satisfy Disston’s labor requirement. It would have been folly in 1872 to attempt the movement of the nearly 900 employees from the Front and Laurel Street factory to Tacony. There were simply not enough houses in the area, and the two hotels could board no more than thirty men. This meant that migration to Tacony would have to be done piecemeal over a number of years. As illustrated in the following chronology, the final migration took twenty-seven years, with but a small portion accomplished during Henry Disston’s lifetime. His vision of a residential area for his workers would be completed by his wife, Mary, and his children.29

This piecemeal transition allowed the transfer to take place without disrupting business. Except for the initial move of the jobbing shop, the plan worked well. Besides increased profits from an enlarged factory, the scheme augured well for real estate development. Cheap

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Transfer of the Keystone Works to Tacony</th>
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<tbody>
<tr>
<td>Ground Broken for Mill at Tacony</td>
<td>1872</td>
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<tr>
<td>Moved Handle Shop</td>
<td>Nov. 1872</td>
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<tr>
<td>Moved File Shop</td>
<td>1873</td>
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<tr>
<td>Began Building Steel Works</td>
<td>1877</td>
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<td>Moved Steel Workers</td>
<td>1879</td>
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<td>Moved Long Saws</td>
<td>1881</td>
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<tr>
<td>Moved Hardening</td>
<td>1881</td>
</tr>
<tr>
<td>Moved Circular Saw Department</td>
<td>1882</td>
</tr>
<tr>
<td>Moved Jobbing Shop</td>
<td>1883</td>
</tr>
<tr>
<td>Moved Hand Saw Department</td>
<td>1884</td>
</tr>
<tr>
<td>Jobbing Shop moved back to Laurel St. because of inconvenience to customers</td>
<td>1885</td>
</tr>
<tr>
<td>Moved Square and Level Department</td>
<td>1887</td>
</tr>
<tr>
<td>Moved Butcher Saw and Trowel Dept.</td>
<td>1896</td>
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<tr>
<td>Moved Jobbing Shop</td>
<td>1899</td>
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farm land offered great potential for profit, even if money had to be spent on community needs such as streets and a school. Development of this farm area had two phases: attracting skilled workers and building houses for them.30

William Smith, a cousin of Henry Disston and later the firm's master mechanic, remembered well the building of the first Disston factory in Tacony. On the last Thursday night in September 1872, Henry Disston, Samuel Bevan (then master mechanic), and Smith were in Tacony, marking out the corners for the building. They were discussing the talk in Philadelphia that Disston was moving "too far out of town for his own good." Disston insisted that they start that night to dig the foundation: "Tomorrow's Friday. I'm not a bit superstitious, but those fellows who advised us not to move up here would certainly have a good laugh if anything went wrong, and some would surely say it was because we started on Friday." That night the three men dug the foundation for one half side of a building. It was to become the file works.

A November, 1872, fire destroyed some of the Laurel Street plant, forcing Disston to set up a temporary handle shop in the new building. The relocation of the entire file works would have to wait until 1873. The most difficult operation to move was the steel plant. So that it would be done right, master English smelter Jonathan Marsden moved to Tacony in 1875 to plan and supervise the construction of the steel plant. The steelworkers followed four years later.31

In 1876 Henry Disston began to build homes on the carefully designed lots in his planned residential community west of the Pennsylvania Railroad's newly acquired and now directly connected Philadelphia-to-New York railroad tracks. Disston refused to use water from the Delaware River, which the rest of the city utilized. To ensure a pure supply of drinking water, he built a water pumping station at Sandy Ford Springs, a feeder stream of the Pennypack Creek some

30 First, Disston opened a small saw mill on the property as a laboratory to test experimental saws. Sawyers from the Laurel Street plant moved into a nearby hotel, and the experimental station began testing saws from the Laurel Street factory. Annual Report of the Secretary of Internal Affairs, E25-E30; Morgan, "Family Enterprise I," 19; George Smedley Webster, "Plan of Building Lots Belonging to Henry Disston and Sons, Philadelphia 1890," in Disston Collection.

31 Disston, Henry Disston, 16-17.
Table 2
Tacony Census 1880
Birthplaces of Workers at Keystone Saw Works, Tacony plant

<table>
<thead>
<tr>
<th></th>
<th>File Shop*</th>
<th>Saw Shop</th>
<th>Machinist</th>
<th>Laborer**</th>
<th>Engineer</th>
<th>Steel melter</th>
<th>Office boy</th>
<th>Night Watchman</th>
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<td>Total</td>
<td>44</td>
<td>23</td>
<td>22</td>
<td>18</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>121</td>
</tr>
</tbody>
</table>

* Annie Glenn (age 21) was the only woman in this department. She "label[ed] files." Her job supported a widowed mother. One suspects company generosity in this case; perhaps her father had worked for Disston.

** There were a number of laborers listed in the census. The description laborer applied to many different kinds of work. These laborers were listed with Disston because they had someone in the family working at Disston. I suspect that this number should be larger, considering the needs of the factory but this is impossible to determine. However, there is every reason to believe that many of the early laborers were of Irish heritage.

*** The most common other European country listed was Germany.

two miles from Tacony. Water tanks at what is now Cottage and Disston Streets stored the water and provided a gravity feed to the pipes laid down Longshore Street to the factory. The community could gain access to the water from the Longshore Street line and pay the Disston-controlled Tacony Water Company for the service. This gave Disston's town the purest water in Philadelphia. River water was still used in the steelmaking process. Houses for the workers followed. Eventually, the Disston family would own over 600 homes, holding some 360 in the Mary Disston Estate, until 1943. All other homes in

Table 3
Census 1880
Age of Disston Workers, Tacony Factory

<table>
<thead>
<tr>
<th></th>
<th>Under-10</th>
<th>11-12</th>
<th>13-15</th>
<th>16-17</th>
<th>18-25</th>
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<td>7</td>
<td>21</td>
<td>9</td>
<td>11</td>
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<td>1</td>
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<td>1</td>
<td>1</td>
<td>8</td>
<td>11</td>
<td>11</td>
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<td>1</td>
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<tr>
<td>Steel melter</td>
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<td>0</td>
<td>0</td>
<td>1</td>
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<td>1</td>
</tr>
<tr>
<td>Total</td>
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<td>5</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>28</td>
<td>35</td>
</tr>
</tbody>
</table>

Apprentices 28
Adult Workers 93
Tacony were built by Disston and sold to the workers, or the land was sold outright by the Disston family. Homes could be rented or purchased, according to the worker's desire.\textsuperscript{32}

Simultaneously, Henry's nephew, William Disston, searched for workers in Sheffield to supply the community with much-needed skilled labor. Of the 121 workers with property in Tacony in 1880, 54 were foreign-born. Among skilled workers, 70 percent were foreign-born; they included the recruited engineers William Boardman (age twenty-three) and Richard Seed (age fifty-eight). Almost all men over twenty-six (95 percent) were married, and their wives were classified in the census as housekeepers. Most of these men were skilled tradesmen. Twenty-eight of the workers were of apprentice age and were the children of foreign-born workers. When Disston needed skilled labor, he usually found it more convenient to import workers from England than from the Laurel Street plant. So heavily did English culture permeate Tacony that tea houses were established in the community to serve the customs of tea drinking.\textsuperscript{33}

A series of buildings housed each of the processes in sawmaking; others were used as storage. The single factory became a combination steel works, hand saw factory, handle factory, circular saw factory, butcher saw and trowel shop, smithing shop, jobbing shop, and machine shop—all of which was now classified because of its many facets as a "manufacturing plant." Volume ordering yielded lower rates for raw materials. The gradual movement of the plant to Tacony, where land was cheap and transportation on water and rail readily available, reduced overhead costs further. Buildings could be constructed on a single floor, coal could be transported inexpensively by water, and products could be shipped by rail or water.

Disston's partnership structure allowed this process of growth to occur with few impediments. Brothers and brothers-in-law were given

\textsuperscript{32} Interview with Catharine Seed, April 14, 1989; Tacony Souvenir Program, Prepared for the Grand Celebration at Tacony Week of May 30th, 1906 (Philadelphia, 1906); “United States Census,” 1880, Philadelphia, 35th Ward.

\textsuperscript{33} “United States Census,” 1880, Philadelphia, 35th Ward. There were few streets in Tacony at the time of the census. For the tea house, see the picture at the Tacony Free Library, Knorr and Torresdale Avenue, Philadelphia. The picture shows the Achuff family in front of their grocery store at Hegerman and Unruh Streets. The store is called the “Washington Tea House,” 1916.
partnerships to oversee certain shops. So it was that the jobbing shop was owned jointly by brothers William, Henry, and Thomas Disston, the square and level shop by Henry and Joab Morse (his wife was a sister of Mary Disston), and the butcher saw and trowel shop by Henry and brother Charles. Master engineer William Smith was a Disston relative, as was his replacement Samuel Bevan. This organization, based on family trust, allowed Henry Disston to expand his factory while at the same time keeping smaller, more manageable financial and production structures. Despite the increasing size of the operation, Disston could easily identify trouble spots and continue to have confidence that those heading individual shops were working in the family's best interest. This organizational pattern, with so many family members directly coming in contact with the workers each day, furthered Disston's paternalistic ideas.\(^{34}\)

The success of paternalism in the textile towns of New England was well known to Philadelphia manufacturers, although Henry Disston had little or no personal contact with the region. Experiments, such as those begun by the John B. Stetson Hat Company, were another visible example of the doctrine. But Disston's own English heritage and continued contact with industrialists there, supported by the cultural baggage skilled craftsmen brought with them from England, were undoubtedly responsible for the nature and scope of the Tacony experiment.\(^{35}\)

The idea of paternalism as a means of organizing work began in "patriarchal Principles" of Victorian England. One historian goes so far as to claim that paternalistic thought permeated every facet of life in mid-nineteenth-century England, insisting that "no social outlook had deeper roots and a wider appeal than did that which twentieth-century historians call paternalism." English Victorian paternalists viewed the relationship between capital and labor as reciprocal and decried the ambitious manufacturers and disorderly workmen who were changing behavioral patterns in society by pursuing their own selfish ends. "The greedy, grasping spirit of commercial and manufacturing ambition and avarice," wrote the English poet Robert Southey in 1830, "is the root of all our evils." Similarly, the poet Samuel

\(^{34}\) Scranton and Licht, *Worksights*, 165-81.

\(^{35}\) "Disston History" (see insert before title page).
Taylor Coleridge, in work republished after his death in 1839, warned against the social and morally destabilizing effects of “the overbalance of commercial spirit in consequence of the absence or weakness of the counterweight.” For Coleridge, one of the best counterweights was landed property. Land was fixed and permanent and provided for order and the good governance of men, while commercial property had no concern other than “the quickest profit and least cost.” The English paternalists urged a pastoral paternalism on an industrial order. Such reform must come from those with landed wealth and moral character. In the words of Thomas Arnold, by bringing the values of landed property to the businessman, “the chimney’s [sic] of Sheffield [will] be as valuable to the well-being of the English as Lord Fitzwilliam’s land domains, for without them ‘England would be no
better than Russia or Poland—we should be the mere serfs of a territorial aristocracy.” Historian David Roberts found the paternalistic beliefs of the English Victorians to be centered on the assumption that society should be authoritarian, hierarchical, organic, and pluralistic. Henry Disston’s actions mirrored these premises.36

Disston’s paternal authority over his work force was in part exercised through the deed restrictions placed on property he sold. George Smedley Webster planned the community by surveying the land and dividing it into saleable lots. At Disston’s request, these lots were spacious enough to permit the building of twin homes while still giving the occupants ample light and air. Further, an informal decision not to permit bells in the church steeples left the town and factory free from the rowdy behavior of the volunteer fire companies which the city had so long tolerated. The restrictions placed on these 300 acres of designated residential building lots were clear and were enforced.

No tavern or building for the sale or manufacture of Beer or Liquors of any kind or description and no court house, carpentry, blacksmith, currier

36 For Roberts’s summary of English paternalistic views, see Roberts, Paternalism in Early Victorian England, 2-10, 25-27. Roberts describes paternalism as “an outlook held by landowners, captains of industry, clergymen, members of Parliament, justices of the peace, civil servants, newspaper editors, novelists, poets, and university dons. It was even held, as habits of deference, by agricultural laborers, operatives, and the worthy poor. It informed social attitudes at all levels of society and expressed itself in countless ways.” Quotations in the text are from Robert Southey’s Sir Thomas More or Colloques on the Progress of Society (London, 1832), which contained many pleas for a more paternalistic society; Samuel Taylor Coleridge, Two Lay Sermons (1816; reprint ed., London, 1839), which explored the philosophical and moral basis for paternalism; and Thomas Arnold, Letters on Our Social Condition (London, 1832), which called for reform of the church by joining churchmen and earnest manufacturers in a paternalist crusade to help the poor. Books on paternalism in America include Hareven and Langenbach, Amoskeag; Thomas Bender, Toward an Urban Vision: Ideas and Institutions in Nineteenth-Century America (Lexington, 1976); and Keith C. Petersen, Company Town: Poilatch, Idaho, and the Poilatch Lumber Company (Pullman, 1987). For yet another cultural view of paternalism, see John Bennett and Iwao Ishino, Paternalism in the Japanese Economy: Anthropological Studies of Obabun-Kobun Patterns (Minneapolis, 1963). Contemporary definitions of paternalism tend to be negative. Defined as a kind of “benevolent despotism,” paternalism has become a symbol of an outdated practice in a more global and less autocratic corporate business world. Nevertheless, paternalism, which has its origins in religious beliefs in a “benevolent father” who looks after the well-being of his children and subjects, was originally viewed as a positive force. The strength of the church in Europe prior to the twentieth century also helped promote paternalism, urging men to value their stewardship over their fellow man, first in religion, then as land owners, and finally as manufacturers.
Washington Tea House. Henry Disston brought over 200 steel makers from Sheffield, England, between 1880 and 1900 who in turn promoted English culture in Disston’s isolated Tacony community. The tea house was owned by the Achuff family shown in the picture. The building still stands at Hegerman and Unruh Streets. Courtesy of the Atwater Kent Museum.

or machine shop, livery stables, slaughter houses, soap or glue boiling establishment or factory of any kind whatsoever where steam-power shall be used or occupied on the said lots, tracts or piece of land or any part thereof.\(^\text{37}\)

Each of these restrictions was conceived to make the neighborhood more livable and provide for what Disston viewed as a better life.

Smell and noise abatement and a ban on saloons certainly were features shared by few Philadelphia communities, but the real beneficiary of these rules was the firm of Disston & Sons. "No taverns" left men sober for work; no bells in churches limited factory disruptions; the absence of steam engines meant less competition from other factories for the community's meager work force; and the ban on stables, besides eliminating smells, limited the distance that workers could live away from the factory, forcing newcomers to the Disston Works to buy land close to the factory—land owned by the Disston family. Moreover, the elimination of these urban nuisances enhanced the value of the land held by Disston.

The community park was Disston family paternalism at work. In an area bordering on woods and farms, it was hardly necessary to have a park. Picnics and outings in the countryside were a few steps away and common practice in nearby Holmesburg. Why a park in the center of Tacony? Because if Tacony was to become a respectable, civilized community, it needed a park. The park symbolized orderliness and culture, as opposed to the area's unorganized farms and the semi-wilderness around them. It also became one of Tacony's most prized attractions.

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38 Interview with Henry Disston (grandson of Jacob, Jr.), July 12, 1988. Since church bells alerted small communities to fires, Henry did not wish to repeat the Laurel Street experience of having men, including his own son, leave work.

39 One observer commented: "In the spring of the year, when the flowers are in bloom, the effect must be both pleasing and striking. It attracts the attention of passengers on the numerous trains that pass Tacony." Such parks were the "lungs of the city," the author later stated, adding that every civilized village "should begin by laying out a park," for parks gave those around them the advantage of light and air. "History of Olde Tacony," reprint from Rev. S.F. Hotchkin, The Bristol Pike [Thirty-Fifth Anniversary of Fidelity Federal Savings & Loan, 6958 Torresdale Avenue] ([Philadelphia], n.d.), 4-5. Booklet found in the Tacony Library.

The construction of a music hall in 1885 further showed the need for Henry Disston & Sons to project to the outside world a civilized community. The music hall was built west of the Trenton to Philadelphia railroad tracks when the area was open farm land. The magnificent three-story building with its ornamental front facade and fancy brickwork stood out like a beacon, lighting the strangers' way to a new way of life. It contained three storefronts that eventually formed the nucleus of the town's new commercial center. The second floor featured a large dance floor with an area for an orchestra. The third floor had three meeting rooms. Two of these rooms were used by the benevolent societies as meeting places with a back room housing the community library and scientific society. The large colored glass windows, printed tin ceilings, and library room remain today a visitors' paradise in the refurbished 1885 building.

Crucial to the financial success of the hall was the support of the Disston family. It was
At the heart of paternalism for Disston and others of his time was a strong conviction about the value of dependency, based on the dependents’ respect for their betters and the betters’ stewardship of opportunity and justice. The Disston Crucible opined that paternalism “manifests itself in a watchful care of the comfort of those in your charge” and was not to be confused with behavior “that robs men of initiative, self-reliance and self-respect.”

A story told by Charles T. Gravatt in 1919 about how he got his job at Disston some forty years earlier illustrated the Disston way. Gravatt remembered that foreman Enoch Sinclair had not wanted to hire him. Founder Henry Disston disagreed. “Here is a man hard up. Give him a job.” Sinclair objected that there was no work, but Disston prevailed. Gravatt described what happened next. “I was a knock-about at a small wage for a few weeks, then I was put in the circular saw department. I often think of the very pleasant relations that existed between the men and each of the members of the Disston family”—relations cultivated by Disston’s willingness to carry prospective good workers in hard times and the workers’ appreciation for Disston’s trust.

Depending on the Disston family became a way of life in early Tacony. The economic institutions and power structure were all influenced by them. Henry’s eldest son, Hamilton, Magistrate Thomas South, and son Jacob Disston were the power brokers of the community in its early decades. Magistrate South, with Hamilton Disston’s support, controlled the justice system while doubling as the real estate agent to whom the company referred those seeking to rent or buy a home in Tacony. Financing for the homes was arranged by the current

Jacob Disston who arranged financing and volunteered rent payments for the community scientific society and library. The Disstons knew that the availability of journals such as Scientific America and other books was necessary for the continued growth of their workers. The music hall along with the park, pure water supply, and spacious lots provided for housing were necessary ingredients in Disston’s plan to attract skilled workers into a family-oriented, civilized country village. Disston’s vision consisted of an ideal industrial village with no urban vices. Interview with Louis A. Iatarola, April 13, 1990. The music hall was restored to its 1885 status in 1990 by Iatarola. Located on Longshore Street east of Torresdale Avenue, the hall remains today the center of “old” Tacony.

40 See Disston Crucible, Feb. and March, 1918, Aug., 1923.
secretary of Henry Disston & Sons Keystone Saw Works, Jacob Disston, who doubled as president of the Tacony Trust Company. A newspaper, appropriately called the Tacony New Era, was sponsored and controlled by these financial institutions and the Disston Company. Those who disagreed with policies at Disston or opposed the values expressed in the deed restrictions had no means of addressing their grievances except to leave the community.42

In a paternalistic structure, each individual had his function, his place, his protectors, and his duties—all bound to others in a network of reciprocal obligations. An organic society did not mean one uniform or standard role. Rather, it promoted mutuality. Henry Disston said as much in a letter addressed to his employees on November 13, 1867.

This is what I live for. We all ought to live to make each other happy. God knows the greatest desire of my life is to see all that I am connected with happy. And I believe to this day that there is not a happier or more contented family in the world. I say family—because I consider you and myself one and the same family. There has never been any wants that I could afford to alleviate but that I endeavored to do so as I would my nearest kin. . . . The object of man and boss should be mutual, the boss to give all he can when times will permit, and the Men under close competition to be willing to help. . . . Whatever money I make is spent in improvements to facilitate us in putting goods into the market at such prices that we will have work as long as any house. Then let us put our best exertions together and see if we can keep full time.43

Apprenticeship had been practiced at the Keystone Saw Works from its founding. Henry Disston went so far as to require each of his sons to apprentice in one of the shops. Apprentices generally began working between the ages of twelve and sixteen. The contract stipulated a four-year period of apprenticeship at one-fifth of what adult workers earned, but usually guaranteed advancement in the firm and a good future livelihood. Paternalistic control over these workers was maintained by provisions like the following:

42 "Disston History," 70-81; and the Disston Crucible for 1913-1925. For information about Tacony, see the copies for June, 1913, and Aug. and Sept., 1915.
43 Henry Disston to "Fellow Workers," Nov. 13, 1867, in "Disston History," 32. The letter was written to thank the workers for their gift of silverware.
The apprentice doth covenant and promise, that he will serve his master faithfully, keep his secrets, and obey his lawful commands. . . . that he will not contract matrimony within said term—that he will not play cards, dice, or any other unlawful game, thereby his master may be injured—nor haunt ale-houses, taverns nor play horses, but in all things behave himself as a faithful apprentice.

Movement of the factory to Tacony changed this contract system for apprentices. Signed contracts were unnecessary once the nuclear family was firmly established in a small town setting. Good workers were assured that their children would be considered first for apprenticeship openings. In turn, they made sure their sons kept their commitment to the company.

Yet another benefit for the family of Disston workers was the Keystone Beneficial Association, established by the company in the 1860s and brought to Tacony when the company relocated. By 1918 the Association had a membership of 594 workers, meeting monthly in the Tacony Trust building. They paid a fifty-cent fee at each meeting, which assured them of a one-hundred-dollar death benefit and fifty-dollar monthly payment in case of long-term illness. A planned yearly excursion by the membership to Riverside Amusement Park provided $535 to augment the dues. Such organizations were the workers' only security against catastrophic illness. The money from the Beneficial Society was deposited with the Disston Saw Works, whose officers supervised and determined the appropriateness of the payments. The fairness of the company was rarely questioned by the employees. These funds were the only "benefits package" available to the workers of that day. Moreover, it was not unusual for the Disstons to grant their employees a day off with pay and present them and their families with an excursion down the Delaware River. Henry Disston presented each employee with tickets to the Centennial Exhibition in 1876 at a cost to himself of $500. And, as was the custom of many

44 "Disston History," 13, 32, 40, 50, 64.
45 Lawrence Donohue's and Jake Hepp's sons worked at Disston in 1900 as apprentices, with no contract. Interview with Larry Hepp, Aug. 16, 1988; and Lawrence "Ricky" Donohue, July 1, 1989. They noted that throughout the history of the firm the most trusted men began as apprentices. For articles about the families, read Disston "Bits", July, 1919, p. 6; and May, 1920, p. 168.
manufacturers, Christmas turkeys were presented to workers with families.\textsuperscript{46}

For Disston, pluralism was essential to industrial paternalism. His workers adhered to different religions, and fostering these various sects, even Catholicism, was part of his stewardship. While workers might have different religious views and different stations in life, each had important work to do in the factory and demanded respect. These ideas were translated to the community by Disston family members. In Tacony, the Disston family provided a school, fire house, library, scientific society, and newspaper, and sold land to each of the community's churches regardless of denomination.\textsuperscript{47}

Henry Disston's belief that a better way of life for worker and factory owner depended on an authoritarian, hierarchical, organic, and pluralistic society became the basis for paternalism in Tacony. It seemed to work in this small town setting, with little evidence of workers' resentment about the Disston family's influence on their lives. Life was orderly and issues simple. In any case, the Disstons brooked no dissent in the factory village.

Occasionally, a labor dispute broke the surface calm at Tacony, but the Disston paternalism wheeled into place to settle the disturbances. In 1877, a year of labor unrest nationally, labor organizations burgeoned in Philadelphia. One of the Disston men tried to organize the workers at the Laurel Street plant, whereupon the Disston management sent word to the workers that it was "considered injurious to the interest of the company to retain" the man. He was quickly discharged by Disston for disloyalty. In sympathy, some of the men followed the organizer off the job. For the next two days, little or no work was done at the plant as labor organizations in the city protested. Disston hired new workers to take the place of those who had left their jobs. Within a few days the regular workers had returned, and all except those who were most vocal against the company were rehired. This first brush with unionism left Disston relatively unscathed. The later move to Tacony muted labor dissatisfaction and kept paternalism intact.\textsuperscript{48}

\textsuperscript{46} Disston "Bits", March, 1918, p. 85.
\textsuperscript{47} "Disston History," 5-6, 56-57, 82-85; Philadelphia Public Ledger, March 18, 1878.
\textsuperscript{48} "Disston History," 30-32, 42-45, 62-63; Philadelphia Public Ledger, March 18, 1878.
A year following the labor dispute, Henry Disston suffered a stroke. After a partial recovery, he went to Hot Springs, Arkansas, to recuperate. He returned to Philadelphia on March 9, and on the following evening he suffered a second stroke from which he never recovered. He died March 16, 1878, in his fifty-ninth year. Henry Disston's death did not disrupt the continuity of the firm. Hamilton Disston succeeded his father and vowed to maintain the company's paternalistic policies. Nevertheless, the first labor disturbance at Henry Disston & Sons in Tacony occurred in early May 1884. The disagreement began when the company released Joseph Broomhead, a popular supervisor and a seventeen-year employee of Disston. Horace C. Disston, Henry's third son (1855-1900), who was running the company in the absence of his eldest brother and then president of the firm Hamilton Disston, had hired S.T. Williams of the Albany Iron Works to take his place. In early April, Williams sent his nephew, George Thompson, to take charge until he finished his work in Albany. Thompson's first act was to fire two men and employ boys at lower wages. About the same time, letters were received in Tacony from Trenton, New Jersey, and Johnstown, Pennsylvania, along with an issue of the *Troy Observer*, all unfavorable to Williams's management of workers. He was charged with "brutality to the men under him and of his introducing Swedes, Hungarians and in a few cases Italians in the mills under his charge for the purpose of reducing wages." The workers from the rolling mill demanded a meeting with Horace C. Disston and confronted him with the information on Williams and an ultimatum: "unless Williams was discharged they would all leave in two weeks." Disston subsequently closed down the rolling mill, throwing fifty-one men out of work.

James F. Ryan, chairman of the workers' committee, went to the city's saw manufacturers during the next week to inquire about jobs

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50 Right away Hamilton Disston showed some of the salesmanship of his father. One month after Henry Disston's death, President Rutherford B. Hayes visited Philadelphia and chose to see the Keystone Saw Works in Kensington. He was escorted through the factory by the firm's new president, Hamilton Disston. To impress President Hayes with the productivity of the factory, Disston arranged to show him a flat piece of steel when he entered the factory. Two hours later Hayes received a new saw made from the piece of steel that he had seen at the beginning of his tour. "Disston History," 4-5; *Disston Crucible*, June, 1914, pp. 74-80.
for the men. No company in Philadelphia could accommodate such large numbers on such short notice. The Knights of Labor promised assistance, but Tacony was far removed from their power bases in the more populated industrial sections of the city. Meanwhile, the company capitalized on the mill closing by making improvements to the building. It was having it both ways—initiating improvements and punishing militant workers. After two weeks the mill was opened again, and Disston was ready to reinstate the fired workers, “with the exception of certain leaders.” Horace Disston felt that a few leaders had misinformed the men that wages would be lowered if Williams’s improvements were implemented. He assured them that the gossip about wage cuts was untrue. The men returned to work under Williams at a 5 percent increase in pay. Williams stayed on at the company for the next decade.\textsuperscript{51}

Two years later a five-week strike, the longest of the century for Disston, occurred over a wage cut. Paternalism as practiced by the Disston family was supported by steady work at the lowest possible wages. In January 1885 the melters in the Henry Disston & Sons steel mill accepted a 10 percent pay cut, because they were told that the company lacked orders. They were promised that the cut wages would be restored when business picked up. On June 23, 1886, the melters claimed that business had improved and demanded restoration of their wages. The company responded with a 5 percent offer, reminding the men that Disston was already paying higher wages than any steel producer in the state. To prove this, the company offered to pay for a committee (two representatives from the steel melters and one from the company) to visit steel mills in Pittsburgh to compare wages. The steel melters refused, saying that steel was made differently at Tacony and that “no comparison could fairly be made.” The company considered this an act of bad faith and appealed to the striking workers from departments other than the steel mill to be the judges. These men were more willing to listen, since they were losing wages and had nothing to gain from the settlement. They formed a committee of ten, which went to Pittsburgh and verified the company’s statements about steel wages. The strike was broken, and, according to one Disston

\textsuperscript{51} Taggarts’ Sunday Times, May 4, 1884.
superintendent, the men returned to work with the conclusion that there "was no just cause for the recent strike in that department."  

In all three cases the Disston family won the day, just as a forceful father would win out over a recalcitrant child. A lecture about how the company’s position was in the workers’ best interest, followed by a threat of discipline, and the fight was over. At this point, the Disstons made the humane gesture, and only the undeserving few lost their jobs. Here (as elsewhere) labor had to travel a long hard road before workers were equals at the bargaining tables of American industry.

These labor disputes did not significantly hinder the development of Henry Disston’s industrial-utopian community. With his widow in control of the Tacony land and his sons running the factory, the family prospered. The growth of the community was phenomenal, mirroring the growth of the saw works. The city property atlas of 1862 indicates but 22 scattered homes in Tacony. In 1876, just four years after Disston raised his first factory building, there were 42 twin homes and 12 row homes, newly constructed beyond the Philadelphia-Trenton railroad tracks. By 1894 the village had become a small town with well over 500 homes. These were, with a few exceptions, twin houses. Disston’s belief that children and families needed light and yard space had been put into practice. Using a sliding scale, Mary Disston rented a two-bedroom house for eight dollars a month and a five-bedroom house for fifteen. Besides a schoolhouse, there were also a bank, music hall, fire house, police station, waterworks, and park for the employees’ use and protection.

Henry Disston’s business success is in part a sign of the interdependence of paternalism and industrialism. Disston had all of the skills

52 "Disston History," 4-5. Theodore Shoemaker, superintendent of the Disston Works in 1888, wrote the section in "Disston History" on the strikes. He does not mention the 1884 dispute but does refer to the strikes of 1877 and 1886.

53 Smedley, Atlas of the City of Philadelphia . . . 1862; G.M. Hopkins & Company, City Atlas of Philadelphia . . . 1876, Vol. 3; G.M. Bromley & Company, Atlas of Philadelphia . . . 1894, Vol. 13 (Philadelphia, 1894), 23rd and 35th Wards. It is difficult to calculate the total money realized by the Disston family from their Tacony real estate. However, a record exists of real estate sales by Henry Disston’s estate from 1872 to 1895. Listed is every property sold by Disston in Tacony. Total sales for that period were $701,368.89. Much land was left to Mary Disston and the family, all of which was sold after 1895. My best guess is that the development of real estate in Tacony netted the Disston family well over $10 million by the final sale of property in 1943. “Real Estate Sales No. 1, Estate of Henry Disston” (in possession of the author).
and techniques needed for manufacturing success, and he was energetic in putting them into practice. Trained both as a mechanic and as a sawmaker, he knew both how to make saws and how to build the machines that made them better and faster. His energetic commitment to improving both machinery and saws was transmitted to family and workers around him. His understanding of humane management practices and the need for highly skilled workers reinforced Disston's paternalism. Business success gave Disston the capital to provide steady work and money for community housing, water, and social institutions.

Although Disston never wrote a book on business principles, a chronicle of his daily pursuits illustrates a four-cycle business formula for success. Simply stated, he decreased cost and overhead, enlarged the market for his product, avoided labor disputes, and accumulated capital through a process of reinvesting money in the company and land. Successful experimentation with steel formulas, file making, and the band saws used in making saw handles increased the number and quality of the saws produced. The differentiation of labor and the establishment of departments to make specific saw parts—a rolling mill to make flat steel and other shops for teeth cutting, handle making, and finishing—decreased unit costs. Disston's formula for success underlined what the Internal Affairs secretary's 1887 report wanted Pennsylvania industrialists to memorize—namely, that looking after your workers in a paternalistic way resulted in handsome profits. It was good business to be a "good" boss.

The Disston family's accumulation of wealth was accomplished without embittering the workers in the community. Treated well, those living in Tacony owed a debt to the Disston family for their support of almost every new institution in the community. Land was sold at reasonable prices to the workers, yet brought great profits to Disston. Each house built, as the community's population increased from a few hundred in 1871 to approximately 12,000 in 1910, made the remaining land more valuable. This was consistent with the claim of the progressives of that day that in the new industrial society there would be no losers. Disston's purchase of land for the good of the employees was one of the shrewdest real estate deals of his day.54

54 "Disston History," 95-100; Morgan, "Family Enterprise III," 77-79.
The success of any industrial paternalistic community can also be measured by the local leaders' feelings about themselves and the controls exercised by the factory over their lives. In 1906 the leaders of Tacony published a booklet about their town. Released May 30, the *Souvenir Program of the Celebration of Tacony* had pictures of local institutions and emphasized recreation, the local newspaper, the churches of every Christian denomination (there was no Jewish congregation), the new free library, the new post office, and the two local hotels. In a statement laden with middle-class boosterism, the local leaders declared that:

Tacony is a paradise for the working man of moderate means. Here he can enjoy the refreshing comforts of good air, pure water and healthy surroundings. While Tacony is not what might be termed an aristocratic suburb, it nevertheless has a great many handsome residences, and the pairs of pretty homes which are continually being erected add still more to the place, and give it an atmosphere of comfort.\(^5\)

This superficially accurate but naive and idyllic description of Tacony was remarkably similar to the one issued by the Pennsylvania Secretary of Internal Affairs some eighteen years earlier. It would seem that the Disstons' paternalism and community control were considered of great benefit by those being manipulated, as is often the case in any successful social experiment. Henry Disston's vision became their way of life, and long after his death, the people of Tacony agreed with him that social control of the whole community is acceptable if the leader is benevolent and there is a bond of mutual respect based on a willingness to work and the ability to provide work.

In Tacony, Disston combined all of the ingredients of a successful paternalistic manufacturing community: a rural site (even though in the city); ample capital and steady work; his own belief that godliness, order, and authority worked hand in hand; and his religious sense of the value of making men "good." Disston initiated his Tacony experiment fifty years after Lowell and Manchester were begun in New England, clear evidence of the persistence and pervasiveness of the idea in the Western world at that time. Henry Disston's experience

\(^5\) *Tacony Souvenir Program . . . of May 30th, 1906*, 6-9. The program cost five cents and it was printed at the *New Era* newspaper office located at State Road and Knorr Streets.
in manufacturing illustrates the prolonged advocacy and successful use of paternalism by those in America who were best served by an orderly industrial society.\(^{56}\)

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\(^{56}\) For connections between England and the Disston family, see Morgan, "Family Enterprise III," passim; and "Disston History," passim.