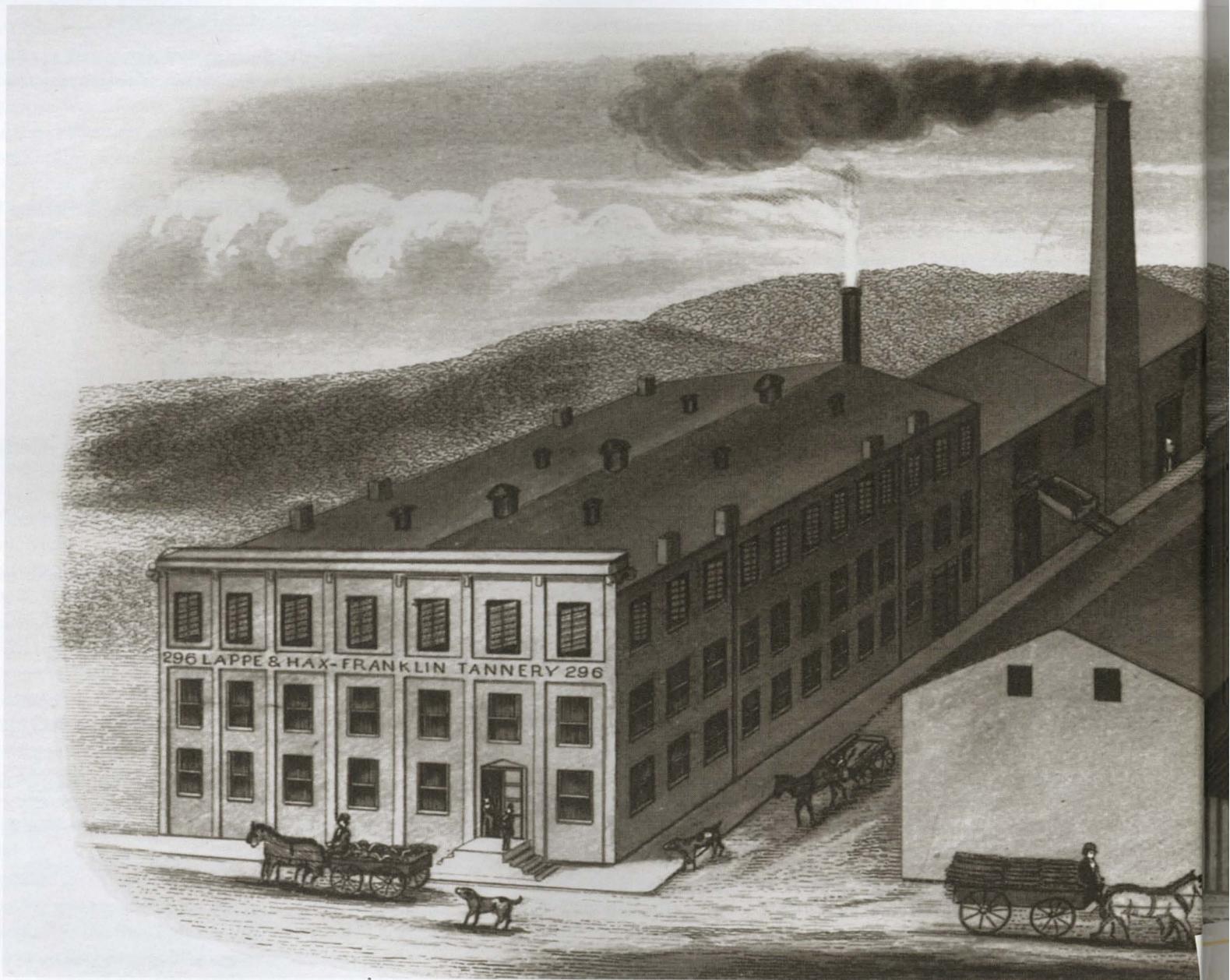


# LEATHER



Tanning and industrial leather works, plus related industries such as meat-packing, accounted for up to 50 percent of Allegheny City's economy during the late 19th century. Leather was also important across the river in

Pittsburgh. Yet, these businesses have been largely overlooked in economic histories. Drawings from the 1890s depict the building on Spring Garden Avenue — it still stands (see page 42) — that housed the

Franklin Tannery before its long association with the Lappe and Hax tanning families, which also operated the Oak Leather Co. Drawings show bark sheds, a bark mill, and a leach house adjoining the main building.

# BOUND

## NINETEENTH-CENTURY LEATHER TANNERS IN ALLEGHENY CITY

BY DAVID S. ROTENSTEIN

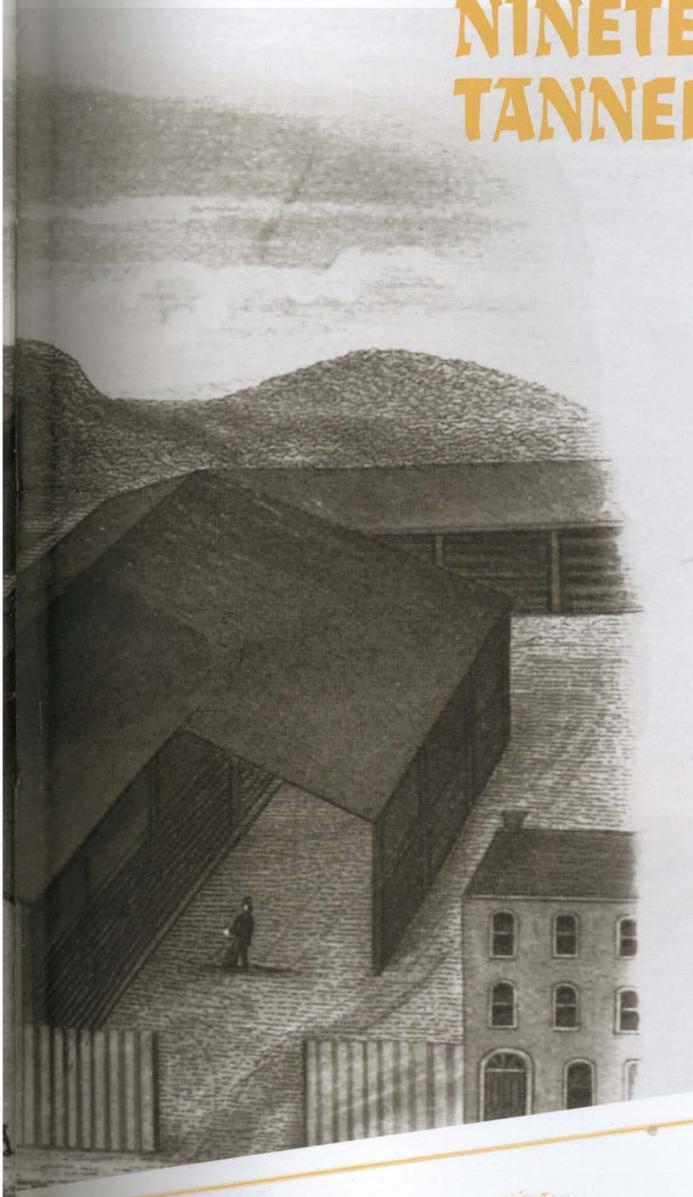


FOR EACH WELL known 19th-century Pittsburgh industrialist, there may be a dozen whose names and contributions to the region's economic development have become footnotes to the achievements of more visible counterparts.

Andrew Carnegie and Henry Clay Frick dominated the iron and steel industry, while Henry J. Heinz bottled pickles and preserves, and banker Andrew Mellon fed the capitalists' crew with cash. Each made an indelible imprint on Pittsburgh as a vital industrial center. Their names mark our financial and cultural institutions, our streets and parks, and each in some way touches the lives of every Pittsburgh resident.

Names of such men as Johann George Lappe, Christian Groetzinger, Gottlieb Wettach, and James Callery, however, do not fall as freely from the lips whenever Pittsburgh's history is discussed. Except for a few street names — Lappe Lane, Wettach Street, and Tanner Street — and the fading ghost lettering on the facades of a few red brick buildings on the North Side, little of substance remains of Pittsburgh's once substantial leather tanning district.

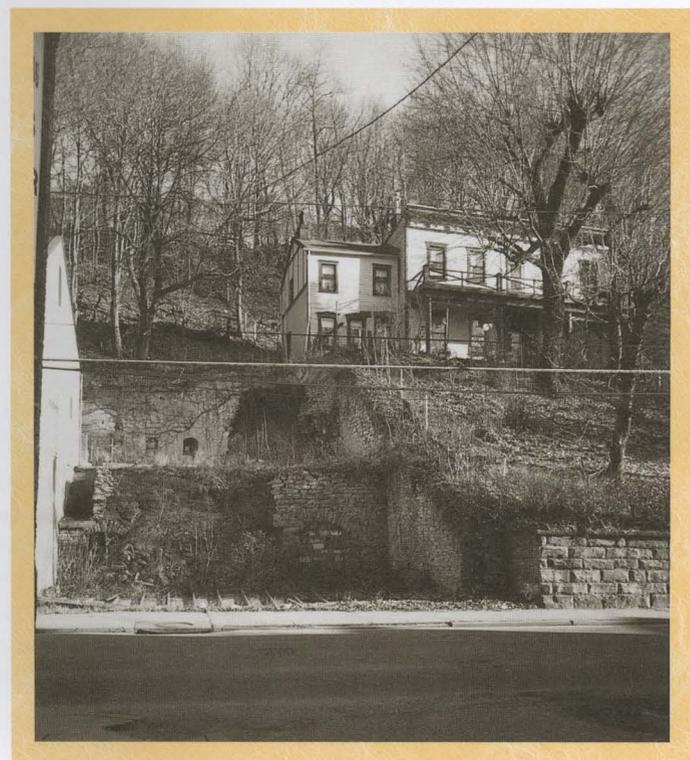
David S. Rotenstein received his Ph.D. in folklore and folklife from the University of Pennsylvania in 1996 with a dissertation on the history of sole leather tanners in eastern Pennsylvania. A Pittsburgh resident, he currently is completing research on a book about Pittsburgh's hide and leather industry.





**Above:** Modern-day signs on streets once part of Allegheny City mark the prominence of tanning and leather in local history. The Lappe family (see *article, page 43-44*), owners of the tannery shown on pages 32-33, also lived in the area. The street bearing their name (now a walkway in many places) crosses Haslage Avenue high

above the old leather and slaughterhouse district in Spring Garden. **Right:** Collapsing foundations along Spring Garden Avenue suggest past commercial use. Owners and workers lived nearby: the house behind the foundation belonged to butcher Edward Rafferty in the late 19th century.



The industry's impact on the regional economy was felt most from about 1850 to 1900, when tanneries flourished along the banks of the Pennsylvania Canal (and later the tracks of the Pennsylvania Railroad) and Spring Garden Run in places such as Allegheny City, Duquesne Borough, and Reserve Township. Allegheny City (the area north of the Allegheny River now known as Pittsburgh's North Side) during this period was one of the nation's premier leather tanning districts, producing award-winning harness leather, sole leather, belt leather (for industrial machinery), and lighter leather (shoe uppers, clothing, etc.). According to U.S. census reports, tanning in 1880 accounted for 11 percent of the city's \$13.7 million manufacturing sector.

By 1893, the trade journal *Shoe and Leather Reporter* would note that Pittsburgh and Allegheny City were "renowned marts for harness [leather]." <sup>1</sup> During the five decades leading up to the 20th century, there were no fewer than a half-dozen large tanneries active in Allegheny City, employing hundreds of men who tanned many thousands of hides and skins annually. But, despite their contributions to the local and national economies, tanners who once made Pittsburgh a leading production center for harness leather have all but disappeared from the historical record.

This history is remarkable as well because of the distribution of tanners across the region. City directories and brief economic narratives of Pittsburgh's early years reveal that tanners were active in the 1820s in the Market Square area of downtown, and also in the Northern Liberties area (now the Strip District) along the Allegheny River. In 1826, there were nine tanneries in Pittsburgh. They employed 52 people and produced \$65,000 worth of leather. By the mid-19th century, there were "tanyards" in Lawrenceville, Allegheny City, and East Liberty. As these places became more attractive to tanners, the industry declined elsewhere in the city. The number of tanneries in Pittsburgh had declined to three by 1880, but a dozen remained in Allegheny City, employing 221 people. A decade later, there were none in Pittsburgh, though tanneries persisted as far north on the Allegheny as Cheswick and along the Monongahela River as far east as Braddock. <sup>2</sup>

The decline of tanning that began within Pittsburgh's city limits foreshadowed its fade within the district as a whole. By 1920, the oldest and largest tanneries had closed due to changes in the demand for leather, increasing transportation costs for raw materials, and reduced interest in the trade among descendants within tanning families.

The boom years in Western Pennsylvania roughly mirrored Pennsylvania's. Between 1880 and 1920, the Keystone State had more tanneries within its boundaries, and produced more leather, than any other. Most of Pennsylvania's leather production was concentrated in large sole leather tanneries scattered throughout the mountain valleys of the northeastern and north-central parts of the state. In 1900, for example, there were 254 active tanneries in Pennsylvania, with \$57.3 million in capital assets producing \$55.6 million worth of tanned leather products. The state's nearest competitor was New York with 147 tanneries producing \$23 million in leather products. <sup>3</sup>

Throughout the 19th century, leather tanning remained in the eyes of tanners and observers a traditional craft. Historian Peter Welsh describes tanning up to 1850 as a "craft that resisted change." <sup>4</sup> In 1900, U.S. Census Special Agent George Houghton observed,

It is a curious feature of the business that, while in nearly every other industry advantage has been taken of labor-saving devices as they are perfected, leather manufacturers were inclined, until about 1880, to discourage any attempt to supersede manual labor with machinery. They preferred, also, to adhere to the formulas and tanning processes which had been handed down for generations from father to son ... <sup>5</sup>

Despite the introduction of new types of machinery, new tanning techniques, and dramatic increases in jobs for both highly specialized and unskilled laborers, tanning remained a craft in which fathers passed the business on to sons, from generation to generation, through the late 19th century. Craft dynasties among tanners — sons brought into the family business and daughters married into other large tanning families — defined the social sphere of tanning, greatly influencing how business was done. These dynasties were prevalent throughout the industry, and Pittsburgh tanners were no exception.

The first modern corporations were formed during the 19th century by families whose small businesses began as sole proprietorships. Larger limited partnerships evolved from these successful family-run businesses, then — after the Industrial Revolution — became corporations with stockholders comprised of family members and interested third parties.

As business entities changed, so did traditional craft practices such as leather tanning. Many tanneries were places where two traditional technologies met: the processing of tree bark and the making of leather. Small "tan yards" formerly had extracted from bark the tannic acid required in the tanning process, but by mid-century large tanneries were processing bark and also making leather. Leather making and bark processing are "serial" production processes in which one step must be completed before the next can begin, and all these steps require a repertoire of skills and tools. To maximize profits and efficiency, some tanners integrated operations vertically by expanding the basic business to include buying vast tracts of forest land for bark.

In addition to processing bark, tanneries in the Pittsburgh area also focused on the other side of the raw material flow: hides and skins. That was because Pittsburgh had a thriving meat processing district of stockyards, slaughterhouses, and butchers. Getting "hides" (the term for larger animals such as cows, buffalo, and horses) and "skins" (from smaller animals such as goats, sheep, and pigs) was as easy as a walk across the street. Throughout the 19th century, Pittsburgh tanning families owned slaughterhouses, glue factories, and other operations that processed animal carcasses. By the 20th century, byproducts such as offal, hair, and hooves were sold also to soap and plaster manufacturers.

Tanneries during the period were actually two processing plants: one for bark and the other for hides and skins. Bark was harvested mainly from hemlock and oak trees, cut into 4-foot long

strips, and shipped by rail or canal barge to the plant, where it was piled into “bark sheds.” It was then ground into a fine powder and placed in pits, where the tannic acid was leached out in water. These pits, consequently, were known in the trade as “leaches.” The solution created by this process was tanning liquor. Once the liquor was of sufficient strength, it was conveyed to tanning vats holding the hides and skins.

Before the hides were ready for the tanning vats, however, several processing steps were required. Upon arrival from the slaughterhouse, they were cleaned of dirt, blood and dung, then immersed in lime pits to loosen hair and fur. After liming, the hides were taken to a “beam room,” where they were draped over a sloping wooden beam and hair and any adhering flesh were removed with a knife that resembled a carpenter’s draw knife. Once clean, they were split into sides (halves) and sent to the tanning vats. The tanning process itself was labor-intensive and lengthy, requiring approximately four to six months to process a complete stock of hides and skins.

Once tanned, the sides were taken to finishing rooms, where they were trimmed and oils and coloring agents were added. Leather made from cattle hides made harnesses, shoes (soles and uppers), and industrial belts. Sheepskins were in demand for pocketbooks and travel bags. Hog skins, too, were in high demand for gloves, book covers, etc. Pittsburgh tanners relied on local, national, and foreign markets for their finished products. While much of the heavier leather for shoes and harnesses was shipped to England and Germany, the lighter leather items appear to have remained in local markets.

Although no business records survive from any of Pittsburgh’s tanneries, circumstantial evidence from government documents and legal instruments such as probate inventories, contracts, and deeds provide some clues about the markets in which Pittsburgh tanners participated. One of Allegheny City’s most prominent tanners, James Callery, shared a building with a trunk manufacturer (W.J. Gilmore) during the last half of the 1860s. A principal in the Gilmore firm, Alex Tindle, remained a silent partner of Callery’s through the 1870s. Second-generation tanner William Wettach’s 1916 probate inventory included accounts with several bag manufacturers including the United Suit Case Co., White Trunk and Bag Co., and the Cleveland Trunk Co. He even made leather used to sheath prosthetic limbs (accounts included the Rochester Artificial Limb Co.). Another tanner was Charles F. Kiefer, one of the earliest documented German tanners in Reserve Township. After his death in 1865, items from his tannery recorded in his probate inventory included 26 sides of finished bridle leather and more than 700 sides of harness leather in varying stages of finishing.

Histories of Allegheny City and Pittsburgh contain only brief anecdotal paragraphs on the region’s tanners. Local histories written during the 1890s included brief biographies of tanners from the Lappe and Groetzinger families, but by the second decade of the 20th century, most of the tanneries had closed and their former owners were consigned to the recesses of memory. Even more recent works like a substantial 1985 survey of Pitts-

burgh archaeological and historical National Register of Historic Places failed to recognize the significance of local tanners.<sup>6</sup> But why?

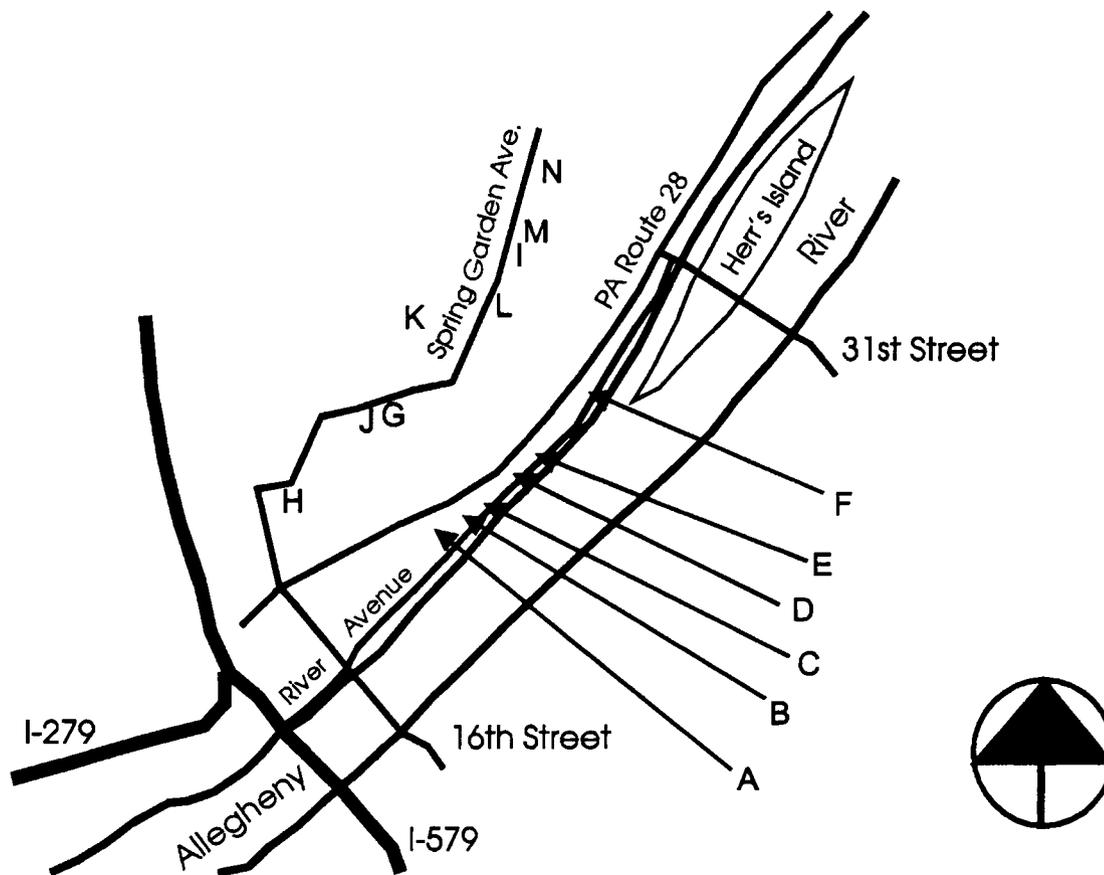
Tanneries were not the best of neighbors, and tanners had complex relationships with their communities. On one hand, they provided steady year-round employment for many men. On the other hand, they were foul-smelling, polluting nuisances around whose plants lingered the stench of rotting flesh and decaying bark used to make tanning liquors. Pittsburgh, like Philadelphia to the east, developed a strong tanning industry because of a great number of meat processing facilities. Their tanneries stood in contrast to the majority of others in the mountain valleys of the state that relied on Pennsylvania’s abundant hemlock resources. It was this rich supply of bark that propelled Pennsylvania to the forefront of leather production in the early 20th century.

At first, sheep, cattle and hogs raised locally supplied local tanners. From farms in Reserve and other neighboring townships, the animals were driven to slaughter along Spring Garden Run. Later, in the 20th century, as Herr’s Island on the Allegheny River near downtown became a way station for livestock moving between the Midwest and New York City, nonlocal animals entered Pittsburgh markets. The meat was sold to local butchers, whose shops lined nearby Saw Mill Run, and the hides went to the tanneries clustered along the run or the narrow strip of land between the Pennsylvania Canal and the Allegheny.

Mary Wohleber, a lifelong Troy Hill resident, recalled air so foul that people kept windows closed year-round. Even North Catholic High School, on Pittsburgh’s North Side, was forced to keep its windows shut. Historian Charles Dahlinger remarked in 1918 that the creek draining “Spring Garden Valley had its borders lined with slaughter-houses and tanneries. The refuse . . . was thrown into the runs, and in summer the stench became unbearable.”<sup>7</sup>

Tanneries were ubiquitous throughout colonial and 19th century America, as well. They were, according to J. Leander Bishop writing in 1864, “a necessary appendage to every village.”<sup>8</sup> City directories identify Pittsburgh tanners of the 1820s as William Bennett, Thomas Sample, and Robert McIlhinny. Across the river in Allegheny, there is no positive evidence of tanning before the late 1840s, although William Hays, who in 1790 had founded a tannery and leather warehouse at 100 Liberty Street in Pittsburgh, bought three tracts of land in July 1814 off Chestnut Street in Allegheny. It is unclear, however, whether Hays, who died in 1848, ever operated a tannery there; courthouse records connect at least one of his sons to an operating tannery in Allegheny in 1850.<sup>9</sup>

Shortly after one son, Charles Hays, acquired sole title to the tannery property, he entered into a partnership with Henry Stewart, doing business as Hays and Stewart. The tannery was not listed in the 1850 U.S. Census, but it does appear two years later in a map of Allegheny City. In 1860, the Hays and Stewart tannery was capitalized at \$55,000 with 13 men producing 5,000 sides of harness leather and 2,500 sides of sole leather in a plant powered by an 8-horsepower engine. The firm’s receipts for its leather, according to the U.S. Census, were \$32,200.



## Principal 19th Century Allegheny City Tanneries

- |          |   |          |  |
|----------|---|----------|--|
| <b>A</b> | Holstein Tannery (1871-1888)<br>Darragh Tannery (1888-c. 1890)<br>Lion Tannery (c. 1890 - 1903)<br>W.P. Lange Tannery (1903-1912)<br>Pittsburgh Wool Co. (1912 - 1958)  | <b>G</b> | J.C. Lappe Keystone Tannery (1866 - 1906)  |
| <b>B</b> | Groetzinger & Sons Tannery (1851 - c. 1877)<br>A. & J. Groetzinger Tannery (c. 1877 - c. 1882)<br>Allegheny Tannery (c. 1882 - 1900)<br>William Flaccus & Sons Oak Leather Co. (1900 - 1942)<br>Edward H. Flaccus Co. (1942 - 1954) | <b>H</b> | J.C. Lappe Keystone Tannery (1844 - 1865)  |
| <b>C</b> | Richard & Charles Hays Tannery (c. 1846 - 1865)<br>Hays & Stewart (1865 - 1870)<br>Duquesne Tannery (James Callery & Co., 1870 - 1918)<br>P. McGraw Wool Co. (1918 - 1954)<br>Pittsburgh Wool Co. (1954 - present)                  | <b>I</b> | George Lappe Tannery (1843 - 1846)<br>G. & M. Lappe Tannery (1846 - 1856)<br>Franklin Tannery (Lappe & Wiese, 1856 - 1872)<br>Franklin Tannery (Lappe & Hax, 1872 - 1882)<br>Martin Lappe & Sons Oak Leather Co. (1882 - 1898)<br>Standard Leather Co. (1898 - 1911) |
| <b>D</b> | Nesmith Tannery (c. 1840 - ca. 1848)<br>John Caldwell Tannery (c. 1848 - c. 1860)<br>Andrew C. Taggart Tannery (c. 1860 - 1866)<br>Pittsburgh Tanning Co. (c. 1867 - 1870)  | <b>J</b> | W.A. Reed Tannery (1867 - 1880)<br>William Flaccus & Sons Tannery (1880 - 1901)  |
| <b>E</b> | John Robenstein Tannery (c. 1850 - 1870)  | <b>K</b> | Gottlieb Wettach Tannery (1859 - 1878)   |
| <b>F</b> | Old Duquesne Tannery (Taggart, c. 1850 - 1864)<br>Old Duquesne Tannery (James Callery, 1864 - 1870)<br>La Belle Tannery (A. & J. Groetzinger, 1882 - 1900)  | <b>L</b> | Jacob Simmendinger Tannery (1846 - 1880)<br>Wettach & Co. Tannery (1880 - 1916)  |
|          |   | <b>M</b> | H. & A. Freund Tannery (1857 - 1872)   |
|          |   | <b>N</b> | Charles F. Kiefer Tannery (c. 1847 - 1880)   |



The industry's last apparent vestige is Pittsburgh Wool Co., 1230 River Ave., near the H.J. Heinz Co. factory on North Side. Pittsburgh Wool is a family corporation owned by descendants of Charles B. Kumer (seated far right, 1907), originally a minority stockholder. It buys lamb pelts, sells wool to

be made into coats and fine fabrics, and until recently also processed skins, mainly for overseas tanners. W.P. Lange, center, in the former company office on Pindam Street, bought the building in 1903 and was the firm's principal owner before the Kumers took control in the 1940s.



In 1836, a little more than a decade before the first substantive evidence appears for the North Side tanners, Germans (Johann) George Lappe and his wife Eva Elisabeth Hax arrived in the United States with their two sons, Johann Christian and Martin, and five daughters. They settled in Reserve Township and may have begun tanning sheep skins with Charles Kiefer as early as 1841. In June 1843, George Lappe paid Kiefer \$1,050 for a Reserve Township lot between Spring Garden Run and Chestnut Street, and by 1850 he and his sons were operating two large tanneries in Reserve Township, just north of Allegheny City.

The first tannery owned by the Lappes was located on the south side of Spring Garden Avenue at the intersection of present-day Lager Street. At first, the establishment was known as the George Lappe Tannery. Three years after opening, Lappe admitted his son, Martin, into the firm as a partner and it became known as the G. & M. Lappe Tannery. The 1850 census reported that Lappe had invested \$15,000 in capital to tan cattle and sheep hides with a workforce of 10 men. His annual output in 1850 was 600 sides of heavy leather (cow), 2,500 calf skins, and 10,000 sheep skins. The tannery, which was not located on a stream with sufficient fall to run a water wheel and did not have a steam engine, relied on manual labor and equine power to run its bark mill and other machinery.

The second Lappe tannery, run by J. C. (Johann Christian) Lappe, was located on Chestnut Street along Saw Mill Run, just north of its confluence with Spring Garden Run. George Lappe bought the land for this tannery in 1844. The J. C. Lappe Tannery, later called the Keystone Tannery, was capitalized at \$20,000 and employed seven men to produce 300 sides of heavy leather, 2,400 calf skins, and 9,000 sheep skins. This facility also relied solely on manual and equine power.

In 1858, George Lappe died at age 46, leaving an estate valued at \$19,000. His probate inventory shows that he was tanning cattle hides and sheep and hog skins. When he died, he had in stock in his tanneries harness leather, upper and sole leather, and finished skins (for light leathers: gloves, clothing, etc.). He also left 128 cords of oak and 102 cords of hemlock bark (oak liquor being preferred among harness leather tanners), as well as five cords of ground bark. Lappe would have used the hemlock bark to tan his sole leather.

Christopher Groetzinger, like George Lappe, was a German immigrant who founded a leather craft dynasty along the north shore of the Allegheny River. In June 1850, Groetzinger and his sons, Christopher Jr., Adolph, and Julius, rented land in the former Duquesne Borough (after 1868, the 8th Ward of Allegheny City) on which they operated their first tannery. Doing business as Groetzinger and Sons, they built their facility on the Pennsylvania Canal north of Lumber Alley. In the summer of 1864, they bought the land from the holding partnership of Griswold E. Warner and Jacob Painter.

According to the 1860 census, the Groetzinger and Sons Tannery was capitalized at \$12,000 with 10 employees tanning 12,000 sides of sole leather. A 12-horsepower steam engine powered the tannery. In 1867, Christopher Groetzinger Sr. sold his

interest in the tannery to Adolph and Julius for \$32,000; he died December 9, 1878. The brothers did business under the old firm name until the mid-1870s, when they changed its style (the contemporary term for “firm name”) to A. & J. Groetzinger, and by the 1890s this tannery was known as the Allegheny Tannery.

In 1882, Adolph and Julius Groetzinger expanded their business to the east and bought another River Avenue tract opposite the western end of Herr’s Island. They quickly built a second tannery which they called the La Belle Tannery. Eight years later, Adolph sold his interest in the second tannery. Julius had managed their other tannery during the 1870s, while Adolph solidified his position as president of the German National Bank.

While the Lappes and Groetzingers were Allegheny County’s most prominent tanners in the 1840s, others settled into Pittsburgh’s tanning district. City directories from the decade leading up to the Civil War list such firms as Gottlieb Wettach (he made paper and glue during the 1840s), Charles Kiefer, Frank Popp, and A.C. Taggart. According to the 1860 U.S. Census, there were seven tanneries in Duquesne Borough and 12 in Reserve Township. There were more tanneries in the vicinity of Allegheny City than in some Pennsylvania counties.

In 1849, Ireland native James Callery emigrated to the United States. During his first years in America, Callery worked as a journeyman tanner in New Jersey and, by 1854, he was living in Pittsburgh. Callery first appeared in the 1861 *Pittsburgh City Directory*, where he is listed as a currier living on Smallman Street. Three years later, Callery is shown as a tanner in Duquesne Borough living on Bank Lane. During the mid-1860s, Callery began building his substantial empire by renting the Old Duquesne Tannery formerly run by the Taggart family, Andrew and John. In 1866, Callery began acquiring real estate in Duquesne Borough in the strip of land between the former Pennsylvania Canal and Bank Lane (River Avenue). Four years later, he owned two tanneries and a home.

Callery may have proven to have the most business savvy of all his Allegheny City tanner counterparts. In March 1869, he formed Allegheny County’s first tanning corporation, the Pittsburgh Tanning Co. His six partners included a relative of his wife’s, John Downing. Their tannery, which formerly was operated by John Coldwell, was in 1870 a steam-powered plant powered by a 30-horsepower engine. With \$50,000 invested, they employed 15 men whose annual output was 14,000 sides of sole leather and 5,200 calf skins. At his other tannery, Callery had 12 employees tanning 14,000 sides of sole leather and 5,220 calf skins. His tannery was run by a 20-horsepower steam engine and was capitalized at \$40,000.

On Tuesday, July 26, 1870, fierce storms with torrential downpours and frightful lightning swept through Pittsburgh. At around 9 that evening, a bolt of lightning struck Callery’s Old Duquesne Tannery, setting it ablaze. The fire rapidly spread and consumed Callery’s home, the Pittsburgh Tanning Co., John Robenstein’s tannery, and several homes. The area between McFadden and Pine (Pindam) streets was almost completely destroyed. Property losses reached \$75,000.<sup>10</sup>

Robenstein, who suffered a fire once before and whose tannery was mortgaged, suffered a \$10,000 loss and was insured for only half that. He was unable to recover from the fire and does not appear again in any documents as a tanner. Callery, however, rebounded successfully from the devastation. Although he, too, was under-insured,

Callery was able to buy the Hays and Stewart tannery two months later for \$45,000. He paid \$12,000 in cash and was to pay the remainder in annual installments over six years. At the time of Callery's purchase, Hays and Stewart



had 13 employees, a 30-horsepower steam engine, and produced 12,480 sides of harness and sole leather.

Tanneries by the hundreds failed during the 1870s, especially during the national depression that began in 1873. Some of the nation's oldest and largest tanning firms — mostly in New York and eastern Pennsylvania — succumbed to a glutted leather market, depressed prices, and rising transportation costs of raw materials. Despite the poor economic environment, many of the long-time Allegheny City tanners weathered the depression with only minor setbacks. A. & J. Groetzinger reported to the Pennsylvania Secretary of Internal Affairs: "The result of the business for the year 1876 has, like that of the preceding year, not been satisfactory to the tanner. The abnormal condition of our trade, arising chiefly from overproduction, has prevailed almost during the entire year...."<sup>11</sup>

The Centennial Exposition at Philadelphia in 1876 was one of the grandest events of the century. Philadelphia hosted the world in a celebration of American heritage and technology during the summer of 1876. In past years, at other world's fairs, tanners regularly competed to see who the best leather producers were. Winners took home gold medals and found their firms the topic of articles in trade journals such as the *Shoe and Leather Reporter*. Because of its location (Philadelphia) and its timing (the American centennial), this World's Fair was eagerly anticipated by tanners, especially in Pennsylvania. Five Pittsburgh tanners — James Callery, Alexander Holstein, Kiefer, Stifel & Co., J. C. Lappe, and Lappe and Hax — led the harness leather category in medal winners and A. & J. Groetzinger brought home a medal for oak-tanned sole leather.<sup>12</sup>

The Centennial Exposition was only a brief respite from tough economic pressures. By 1878, there were only eight tanneries in Allegheny City, each of them with substantially diminished outputs. John Christian Lappe reported to the Pennsylvania Secretary of Internal Affairs that tanneries run by Frederick

Woelfel, Lappe & Hax, Keifer, Steifel & Co., J. C. Lappe, William Flaccus & Son, A. Holstein, James Callery & Co., and A. & J. Groetzinger had a combined weekly output of 4,000 sides of harness leather in 1878.<sup>13</sup>

That same year, Groetzinger reported a slight upturn in business: "[T]anners, in general, are beginning to feel more hopeful, in view of the good prospects of trade. The demand from our home trade, during the entire fall season, has been constantly in excess of our supply. Have, therefore, accumulated no surplus stock whatever, as was the case in former years when we exported largely to England and Germany." One of Groetzinger's chief products at the time, in contrast to neighbors, was oak and hemlock sole leather.<sup>14</sup>

As the tightening markets began to take their toll on local firms, James Callery died, in April 1881. He was 56, and his firm, James Callery and Co., was worth \$346,723 when he died. His other holdings, including stock in local cotton mills, railroads, and gas and coal companies, among others, comprised an impressive estate of \$930,010. His wife, Rose, and his sons James, William and Charles, took control of his two Allegheny City tanneries and the Liberty Street leather warehouse. More than a decade after James Callery died, the *Shoe and Leather Reporter* wrote in a brief summary of Pittsburgh tanneries: "James Callery & Co. are a leading house. The founder is not living. The business is conducted by his sons, who have two tanneries, the Duquesne and Lion. They learned their business in a good school, for there was no better tanner or more upright man than James Callery."<sup>15</sup>

The tanners of Allegheny City shared some affinities with their counterparts elsewhere in Pennsylvania and contrasted greatly in the ways they procured the raw materials to tan hides and skins. The Allegheny City tanners' diversification into hides and skins from local slaughter cost them greatly in one important area: bark to make tanning liquors — the chemical basis of tanning. Tanneries annually consumed tons of bark, measured in cords. One cord of bark, 128 cubic feet, weighed between 1,600 and 2,300 pounds. Throughout the 19th century, abundant bark supplies pretty much determined where and how successful tanneries would be. Inexpensive and abundant bark was so important, for example, that it fueled a mass exodus of tanners fleeing the deforested Catskill Mountains of New York into Pennsylvania.

Bark was harvested by peeling from living trees during the spring and early months of summer. It was then allowed to season and was hauled to tanneries during the cold autumn and winter months. The sole leather tanneries of the Poconos, and in northern and central Pennsylvania, generally obtained their bark from surrounding townships, many within a 10-mile radius of the tannery. Tanners in Allegheny City lacked a nearby abundant source of bark and had to have it shipped in by rail from the Allegheny Mountains. And it was this cost that put them at a competitive disadvantage once competition stiffened.

Allegheny City tanners paid, in many cases, more than double the prices paid for oak and hemlock bark elsewhere in the state. According to George Lappe's 1858 probate inventory, he had paid

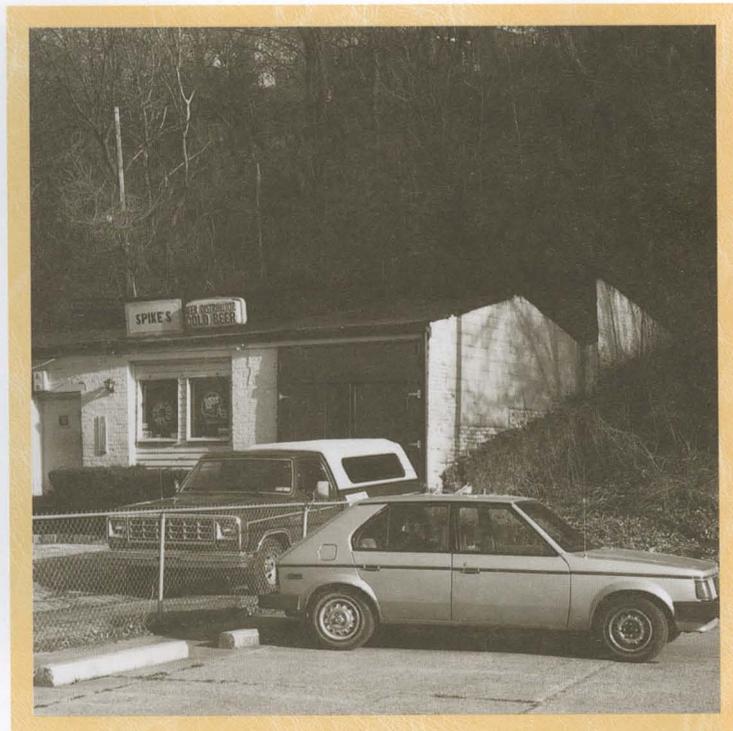


Workers in 1907 surround W.P. Lange (second row, center). Below, sacked wool is loaded from his company's former Pindam Street plant in January 1929, before expansions at H.J. Heinz's condiment factory reconfigured the area. This magazine's cover photo was taken inside the same structure. Beef hides were stored in the adjacent building.



**Right:** Spike's beer distributor, 1453 Spring Garden Ave., remains from the era when slaughterhouses lined the avenue. The building was formerly part of the Oswald & Hess meat-packing company. Note the earth contact, which permitted full use of the building lot and helped maintain

cool summer temperatures. **Below:** The former Lappe & Sons tannery on Spring Garden Avenue at Lager Street (also on page 32-33) is one of only two extant former tanneries. The modern structure includes modifications made c. 1890. Light industrial operations continue there.



\$8 per cord for oak bark and \$5.50 per cord for hemlock. Contemporary tanners in the oak and hemlock forests of the Pocono Mountains and Susquehanna River Valley were paying \$1.75 per cord for hemlock bark and \$2 for oak. More than a decade later, eastern Pennsylvania tanners were paying \$5 per cord of hemlock bark that was peeled and drawn to tanneries by third-party jobbers. Oak bark cost an additional \$1. Because of its bulk and the sheer volume required to keep a tannery in liquors (one cord for each 150 pounds of leather, or, approximately two sides), bark was the single most expensive item in most 19th-century tanneries. Besides paying for the bark and its freight, each season the tanners had to hire additional hands to handle the bark. The Adolph and Julius Groetzinger tannery reported to the Pennsylvania Secretary of Internal Affairs that “extra laborers, hired during the year for unloading and piling bark...” were paid \$1 per day, the same rate as the lowest paid regular worker, the general laborers.<sup>16</sup>

Despite the differences in ways they obtained their raw materials, Allegheny City tanners shared many features of business with other Pennsylvania tanners. Census data collected in 1850 and 1860 show that the Allegheny City tanners widely adopted steam power at the same time as counterparts throughout the state. Allegheny City tanners also adopted other technological innovations that swept the industry. Before 1852, tanners recycled “tan bark” removed from the leaches (where the liquors were made) or tanning vats by drying it and storing it until the winter for use as heating fuel and, in rare instances, as fuel to power steam engines. In 1852, Ulster County, N.Y., tanner Joseph B. Hoyt invented a method of burning wet spent bark, thereby increasing the efficiency of using the waste directly from the leaches. “This improvement revolutionized the construction of our tanneries. It rendered water power of little or no value,” wrote New York tanner Jackson Schultz in 1876.<sup>17</sup> And, it provided tanners with the means to inexpensively adopt steam power while simultaneously disposing of tons of otherwise useless waste each year. John Christian Lappe, in 1878, noted: “I occupy a three-storied brick and frame building .... Power, 30-horsepower engine. Use spent tan for fuel.”<sup>18</sup>

Fire insurance maps published in 1893 indicate that James Callery, A. & J. Groetzinger, Wettach & Co., Woelful and Link, Martin Lappe and Sons, J. Groetzinger and Co., and William Flaccus and Son — i.e., all of the Allegheny City tanneries — each used spent tan bark for fuel.

Allegheny City tanners greatly resembled tanners to the north and east in other ways, as well: craft dynasties were common among local tanners. When George Lappe settled in Reserve Township and began tanning leather with his sons, he founded a dynasty that remained successful for seven decades. Craft dynasties were an important part of the Industrial Revolution. Although the transmission of craft skills within families was widespread, there were aspects of such dynasties among tanners that set them apart from ordinary tradition.

There are three defining characteristics of a craft dynasty. The first is the transmission of a craft from fathers to sons who in turn bring their sons into the family trade. Secondly, and perhaps most

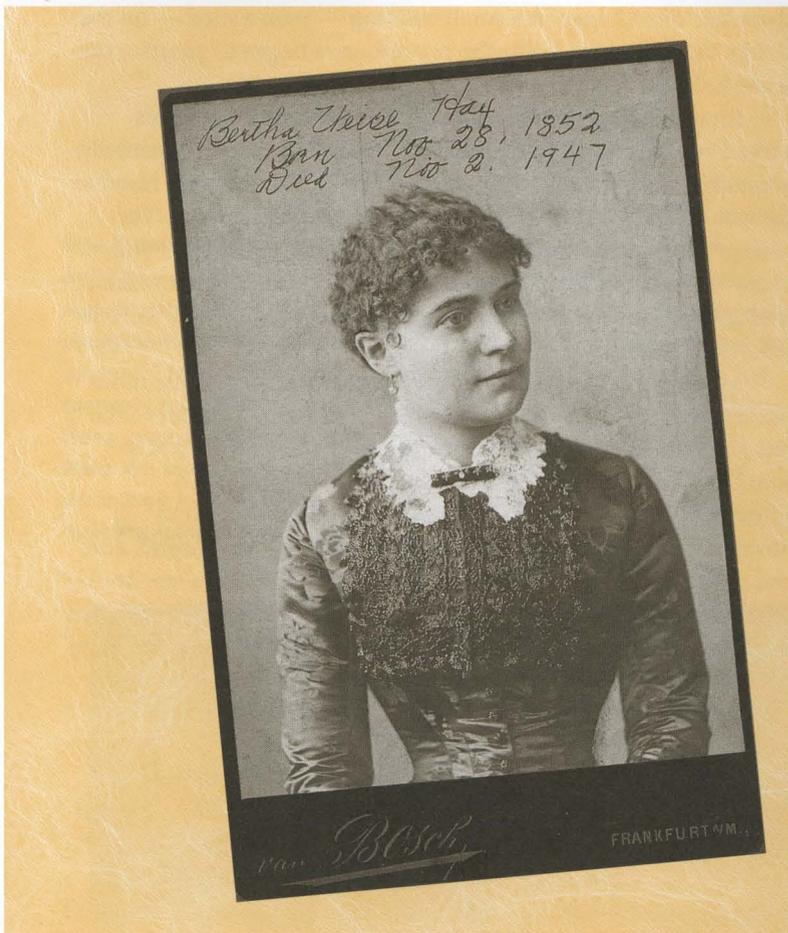
importantly, in families where craft dynasties were perpetuated, marriage with members of other families involved in the same craft often occurred. In tanning, for instance, sons married the daughters of other tanners and the daughters of tanners married other tanners. Finally, craft dynasties were economically viable and were perpetuated by full-time craftsmen. Although the dynasties often began in a small building — even a shed — on the family farm, at some point the practitioners began to practice the trade full-time.

Among early American artisans, large extended families served another purpose: immediate, inexpensive, and perpetually accessible labor. Non-family laborers, when needed, were hired to harvest crops or to assist in labor-intensive seasonal work (like bark peeling and piling), but in surveys conducted by the Pennsylvania Secretary of Internal Affairs in 1876 and 1877,<sup>19</sup> many tanners throughout Pennsylvania reported using only family members as laborers.

As tanneries grew and children matured, sons became more like apprentices than appurtenances. Rural and urban tanners alike passed on their skills and even the assets of their yards to their sons. The quest for capital, according to historian Lucius Ellsworth, was one of two factors behind the formation of business partnerships between tanning families. The second, and not unrelated factor, was the tanners’ “desire to bring a son or relative into the firm.”<sup>20</sup> As more rural tanners shed themselves of their agricultural pursuits for the practice of a full-time trade, they needed considerable capital to build, stock, and operate an independent tannery. Moving from farm to factory, tanners became small businessmen.

The foundation of the Lappe craft dynasty, for example, was set even before George Lappe and his family arrived in the United States. In their native Hessian state of Darmstadt, George had married Eva Elizabeth Hax. Between 1872 and about 1882, the Franklin Tannery was operated under the firm name of Lappe and Hax (comprised of Martin Lappe and Christian C. [C. C.] Hax). Before that, between 1856 and 1872, Adam Wiese (who was married to George Lappe’s daughter, Eva Marie, and who was C. C. Hax’s father-in-law) was a junior partner in the firm Lappe and Wiese. In 1887, Hax formed his own limited partnership: C.C. Hax and Co. The partners included Hax and his relatives, Eva M. Wiese and Charles F. Wiese.

During the 1890s, the Lappes formally chartered their own ventures with the incorporation of the J. C. Lappe Tanning Co. in January of 1891 and the Martin Lappe and Sons Oak Leather Co. in March 1891. In 1894, John Christian Lappe’s sons accelerated the level of vertical integration in the family’s business by forming the Lappe Dressed Beef Co. partnership for the “slaughtering and sale of cattle, calves, sheep, hogs, etc. and curing and smoking of fresh meats and making of sausages and rendering lard and tallow....” By this time, the Lappes owned two Allegheny City tanneries, a Liberty Street leather warehouse, and a slaughterhouse in Steubenville, Ohio. John Christian Lappe died in July of 1901 at age 85. In 1902, the J. C. Lappe Tanning Co. was reorganized under his sons Henry A. Lappe and C. Eugene Lappe, who



Families running Pittsburgh's tanning and livestock industries often intermarried, creating "craft dynasties." A classic example is the firm of Lappe and Hax (see article, page 43-44), united a generation before

in the families' native Germany. C.C. Hax (1844-1927), opposite page, was a principal owner; his wife was Bertha Wiese Hax (1852-1947). When Hax created his own firm in 1887, partners included two of her relatives.

operated the tannery for another four years until they assigned all of their personal and business assets to a third party, Robert Smith; he was charged with assigning "all their property for the benefit of their creditors." According to the November 1906 agreement, the Lappe brothers, "owing to sundry loses [sic.] and misfortunes, are at present unable to discharge their just debts and liabilities...."<sup>21</sup>

Martin Lappe died in July 1896 at age 77. Two years later, in 1898, his sons George and Charles incorporated the Martin Lappe and Sons Oak Leather Co. as the Standard Leather Co. By 1900, they had increased their holdings to include a tannery in Cheswick, Harmar Township. The company's prominence dropped considerably over the next decade. At the March 1, 1911, stockholder's meeting, a resolution was passed to sell the assets (except for real estate) of Standard Leather to the Delaware-based National Leather Co. On October 14, 1913, Standard Leather was declared bankrupt and its real estate was sold at public auction later that year.

The Lappe leather dynasty ended with the 1913 bankruptcy. Descendants of Martin Lappe who still live in Pittsburgh have only shreds and patches of memories handed down through the generations. None of the family's tanning history survives intact. "My grandmother's name," Tom Armstrong offered when interviewed in 1996, "was Florence Lappe and her father was Charles Lappe and her grandfather was Martin Lappe and I think Martin Lappe actually owned tanneries. So Martin would be my great-great grandfather." Armstrong's mother, Harriet, simply said: "They [the Lappes] didn't talk about themselves." Martin Lappe's tannery building at 296 Spring Garden Avenue survives as a vacant industrial shell. The Keystone Tannery site of the J. C. Lappe Tanning Co. is a vacant lot from which Tanner Street opens onto Spring Garden Avenue.

As the 20th century approached, the extended Lappe family, including the Haxes and Wieses, married into other Pittsburgh families. The Armstrongs who descended from Martin Lappe are one example. Others include the descendants of C. C. Hax. In 1895, Hax's oldest daughter, Minnie, married William Thomas McCullough. McCullough's grandchildren include the award-winning historian David McCullough and his older brother (an authority in his own right on Pittsburgh history), Christian Hax McCullough, who lives in the northern suburb of Fox Chapel.<sup>22</sup>

Hax McCullough remembers his grandmother as a rigid, quiet woman whom he visited as a child in her Schenley Hotel suite in the city's Oakland district. "When I went there I was told to be quiet, [and to] speak when spoken to," McCullough recalled in a 1996 interview. "The furniture was very Victorian; you were not likely to be put at ease if you were a young boy."

McCullough learned little of his family's leather-bound roots. Although his "father always told me about the C.C. Hax Leather Company," McCullough said he learned few details. "C.C. Hax was very quiet — he spoke German in the home.... Christian Hax was said to be a very jolly man, very quiet, somewhat mousy around the house; very smart guy, didn't talk much; old-fashioned, formal, kind, fair, honest, dignified but not pretentious. He spoke German to my father, who knew a little bit...."

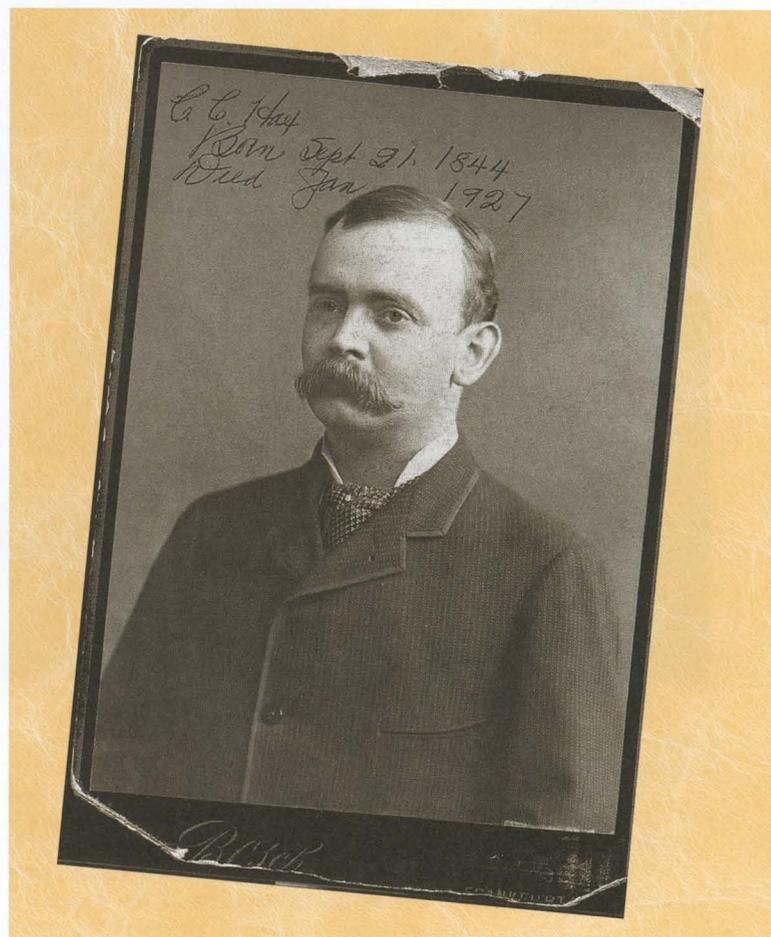
According to McCullough, the family rarely spoke about their cousins, the Lappes. "In fact he said something such as, 'We know that we are related to them.' And that was that."<sup>23</sup>

The Groetzinger family were victims of a similar, albeit earlier, fate as the Lappes. Less is known about the Groetzingers than the other large-scale Allegheny City tanning families. The family's firms, Adolph Groetzinger and A. Groetzinger and Sons, were declared bankrupt in November 1899. The La Belle Tannery, opposite Herr's Island, was sold at a sheriff's sale July 17, 1900, to Jacob Lutz. Two months later, Lutz formed the Lutz and Schramm Co. and began pickling preserves at the former tannery. The former Allegheny Tannery, located adjacent to James Callery's Duquesne Tannery on River Avenue, was sold at a sheriff's sale first to William Callery (James' son) in July 1899 (but the sale was not approved by the court), and finally to David McDowell in November 1900. Two days later, McDowell sold the tannery to William Flaccus, who previously had occupied a tannery next to the J. C. Lappe Tanning Co. on Spring Garden Avenue.

The Allegheny Tannery proved to be the longest-lived tannery on Pittsburgh's North Side. By 1922, it was only one of two tanneries remaining, doing business as the William Flaccus Oak Leather Co. In 1942, the company's president, Edward H. Flaccus (William Flaccus' son), transferred the title to himself and continued business as the Edward Flaccus Co. The tannery had probably discontinued operations ("tanned-out" in the trade vernacular) by the end of World War II. Flaccus sold two-thirds of his interest in the property in April 1946, and died three years later. Today, nothing remains of the Groetzinger-Flaccus Allegheny Tannery. The site is occupied by a large industrial warehouse owned by H. J. Heinz Co.

James Callery's sons continued their father's business. In 1888, Alexander Holstein — owner of the Union Tannery on Pine (Pindam) Street since 1871 — rented his tannery to Angus Darragh, and James Callery Jr. agreed to provide the security for payment of rents and certain aspects of property maintenance. By 1893, the Callerys were renting the former Union Tannery building and its name had been changed to the Lion Tannery. A decade later, the Callerys had vacated the Lion Tannery, and Holstein's estate sold the tannery to William P. Lange, who operated a tannery at first and then in 1912 formed the Pittsburgh Wool Co.

In 1900, Callery's sons James, William, and Charles incorporated the James D. Callery Co. The company continued to operate its Duquesne Tannery on River Avenue until 1918, when it was sold to Patrick McGraw. He did business as the P. McGraw Wool Co., operating a combing plant in the former tannery. In 1954, McGraw's son, Paul, sold the company to Pittsburgh Wool. The brick tannery building still stands. Its River Avenue facade bears faded Duquesne Tannery lettering. The former tannery building, once sandwiched between River Avenue (formerly Bank Lane) and the Pennsylvania Canal (later, the Western Pennsylvania Railroad), remains a prominent landmark along State Route 28. The former tannery's faded lettering, "Pittsburgh Wool Co.," may





An event astonishing to see once occurred daily in Troy Hill for about 75 years. As early as 1885, livestock — primarily pigs — disembarked from railroad cars on Herr's Island a half-mile away. They were herded up the steep

face of Troy Hill near the 40th Street Bridge, and, grunting and defecating, along Rialto Street to Wicklines Lane, where they descended another quarter-mile to slaughterhouses on Spring Garden Avenue.

be read by motorists trapped in traffic leaving the city on the former East Ohio Street.

The rash of bankruptcies that decimated Pittsburgh's tannery district at the turn of the century may be attributed to a combination of several factors. One reason may be linked to the rising costs of bark and bark extracts. At the turn of the century, Pennsylvania tanners had deforested hundreds of thousands of acres of forest lands for bark. As the number of hemlock and oak trees declined, tanners east and north of Pittsburgh reached farther afield to other states and even other countries. One way tanners compensated for the high costs of transporting bark was introducing bark extracts that were shipped by the barrel-load from plants located close to the forest resources. Legal instruments from Pittsburgh tanners show an early reliance on bark extracts, and fire insurance and property maps published between 1872 and 1906 show decreasing areas within tannery complexes covered by bark sheds.

Another factor contributing to the demise of Pittsburgh as an important market for leather may be related to the formation of large leather corporations during the 1890s. Throughout the 19th century, the American leather industry's power base was split between New York and Boston. Merchants in these cities acted as hide brokers, providing hides to tanneries in remote forests and then selling the finished leather to domestic and foreign buyers. Many of the leather merchants also owned and operated tanneries. In 1893, a cartel of sole leather tanners and merchants combined to form the United States Leather Co., composed of nearly 150 tanneries, mostly in Pennsylvania. At the time, the United States Leather Co. was the biggest and wealthiest (on paper) trust in the world. Capitalized at \$124 million, its assets exceeded Carnegie's steel empire, Standard Oil, and the great sugar trust. Six years after the founding of U.S. Leather, the upper and calf skin tanners founded the American Hide and Leather Co.

Although the two big leather corporations — as well as some smaller ones operated as subsidiaries of major meat packers like Armour — had tanneries scattered throughout Pennsylvania, neither had an interest in Pittsburgh. Many small-scale tanners could not compete with these industrial behemoths. Family firms like those that characterized Pittsburgh's industry ended generations of tanning and left the craft permanently.

One other factor that played a role in ending some of Pittsburgh's tanning craft dynasties at the turn of the century may be related to the inability of second- and third-generation tanners to invest the effort that their fathers, uncles, and cousins put into the building of the businesses. Confidential credit reports on Pittsburgh tanners filed to the R.G. Dun Co. (predecessor to Dun and Bradstreet) during the 19th century indicate that the younger generations of tanners did not carry the same economic weight and strength of the older tanners. "Mr. J.C. Lappe stands well in this market," wrote one observer in an 1883 report. "Never heard his credit questioned. The sons are not known to have much outside what their father chooses to give them."<sup>24</sup>

Pittsburgh's forgotten leather tanning district remains but a neglected footnote to the city's great industrial heritage. As Allegheny City was engulfed by its sister city in 1907, memories of the tanners and tanneries who once made Pittsburgh a leading market for the production of harness leather have been swallowed by time. The families who once ground bark and tanned hides and skins throughout the 19th century and into the 20th have moved away or lost much of their history through attrition or disinterest. Despite these formidable obstacles, however, there remains a treasure trove of historical information in the maps and legal instruments that document more than a century of industrial development on Pittsburgh's North Side in old Allegheny City. ◉

#### Notes

- <sup>1</sup> *Shoe and Leather Reporter*, 1893; *Shoe and Leather Reporter*, "Industrial Leaders of Our Time," June 22, 1916.
- <sup>2</sup> U.S. Census, *Report of the Manufactures of the United States at the Tenth Census* (Washington, D.C., 1883); U.S. Census, *Report on Manufacturing Industries in the United States at the Eleventh Census* (Washington, D.C., 1895).
- <sup>3</sup> George Houghton, "Leather Tanned, Curried, and Finished," in *Twelfth Census of the United States* (Washington, D.C., 1905), 701-38.
- <sup>4</sup> Peter Welsh, "A Craft That Resisted Change: American Tanning Practices to 1850," *Technology and Culture* 4 (3), 298-817.
- <sup>5</sup> Houghton, "Leather, Tanned, Curried and Finished," 701-38.
- <sup>6</sup> Verna Cowin, *Pittsburgh Archeological Resources and National Register Survey* (Pittsburgh, 1985).
- <sup>7</sup> Charles W. Dahlinger, "Old Allegheny," *Western Pennsylvania Historical Magazine* 1 (4), 161-223.
- <sup>8</sup> J. Leander Bishop, *A History of American Manufactures From 1608 to 1860* (Philadelphia, 1864), 445.
- <sup>9</sup> Hays died in 1848 and his sons, Richard and Charles, inherited his property, including one or more tanneries and a leather warehouse in downtown Pittsburgh. The earliest documentation of a Hays tannery in Allegheny City occurs in a June 1850 deed in which Richard transfers title of three tracts purchased in 1846 between the Pennsylvania Canal and River Avenue to his brother. The deed notes the tract on the "Towing path of the Pennsylvania Canal on which are erected a tannery and two-story brick building."
- <sup>10</sup> *Pittsburgh Daily Gazette*, July 28, 1870.
- <sup>11</sup> *Annual Report of the Secretary of Internal Affairs of the Commonwealth of Pennsylvania for 1876-77, Part III – Industrial Statistics* (Harrisburg, 1878), 446-47 (hereafter *Pa. Annual Report 1876-77*).
- <sup>12</sup> *Shoe and Leather Reporter*, 5 Oct. 1876, 1379.
- <sup>13</sup> *Annual Report of the Secretary of Internal Affairs of the Commonwealth of Pennsylvania for 1877-78, Part III – Industrial Statistics* (Harrisburg, 1879), 730-31 (hereafter *Pa. Annual Report 1877-78*).
- <sup>14</sup> *Ibid.*
- <sup>15</sup> *Shoe and Leather Reporter*, 22 June 1893, 1516.
- <sup>16</sup> *Pa. Annual Report 1876-77*, 446-47.
- <sup>17</sup> Jackson S. Schultz, *The Leather Manufacture in the United States: A Dissertation on the Methods and Economics of Tanning* (New York, 1876), 146.
- <sup>18</sup> *Pa. Annual Report 1877-78*, 730-31.
- <sup>19</sup> *Pa. Annual Report 1876-77*, 446-47; *Pa. Annual Report 1877-78*, 730-31.
- <sup>20</sup> Lucius Ellsworth, *Craft to National Industry in the Nineteenth Century: A Case Study of the Transformation of the New York State Tanning Industry* (New York, 1875), 56-7.
- <sup>21</sup> Deed of Henry A. Lappe et. al. to Robert Smith, 27 Nov. 1906, Allegheny County Deed Book 1484.
- <sup>22</sup> Jerome Anderson, *The American Ancestry of David McCullough* (Boston, 1995).
- <sup>23</sup> C. Hax McCullough, interview, 25 July 1996.
- <sup>24</sup> *Pennsylvania*, vol. 12, 257. R.G. Dun & Co. Collection, Baker Library, Harvard University Graduate School of Business Administration.