‘IT WAS IN THE WATER’:
CHICAGO’S LEATHER INDUSTRY, 1886-1917

by

Richard Lara

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Arts in American Material Culture

Spring 2019

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For Samantha
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ABSTRACT

Tanning is the process by which animal hides and skins are chemically changed into leather. The hides and skins used to make leather throughout most of history have been by-products of our food industry. Leather objects that fill the historic collections of museums today—such as upholstered furniture, fire buckets, bellows, gloves, shoes, pocketbooks, and baseball gloves—once began as hides and skins in butcher shops and slaughterhouses, were then tanned into leather through ‘recipes’ created by tanners, were later crafted into functional and decorative objects by the hands of tradespeople, and were finally utilized in the daily lives of consumers. This thesis explores the industrial and material history of Chicago’s leather industry between 1886 and 1917 for the purpose of better understanding how leather objects materialize from hides and skins to finished consumer products. For this to be achieved, this work first examines one of the most overlooked but crucial materials in the tanning process, water. The pages thereafter illuminate the lives and work of three Chicagoans who lived different experiences in the city’s leather industry, yet all contributed to the material, cultural, and legacy of the animal by-product in Chicago. The vignettes highlight the journey of leather objects through the industry, from tanning with W.N. Eisendrath after the dissolution of his partnership in 1886, to glovemaking and labor relations with Agnes Nestor around 1900, and to both tanning and producing finished goods with Isidore Horween until 1917. Chicago’s leather industry represents an archetypal case study for what was similarly occurring in Philadelphia, Boston, and New York. The industries differed in tanners, recipes, and the physical characteristics of leather, but the structure of the industry, flow of material, and tanning technology remained remarkably similar.
Chapter 1

CHICAGO’S LEATHER INDUSTRY

In his early twenties, and thousands of miles away from his native Ukraine in the Russian Empire, Isidore Horween arrived in the haze of Chicago’s industrial smoke only months before the opening festivities of the 1893 World’s Columbian Exposition. That year Chicago was at the center of commerce and industry in the American West. With eastern cities fuming with jealousy over Chicago playing host to the cultural fête, the local organizers of the World’s Fair put the city’s industrial dominance on display by constructing the largest structure on earth at the time, the Manufactures and Liberal Arts Building. Oral tradition in the Horween family does not place Isidore’s first job in America among the hundreds that were offered in the Manufactures building. Rather, it came as a by-product of an interaction he had in the Fair’s Shoe and Leather Building.¹

Overshadowed by the Agriculture Building to its north, the Shoe and Leather Building was situated on the shore of Lake Michigan in Jackson Park. It stood five hundred and seventy-five feet long by one hundred and fifty feet wide, and the building boasted a lighting source of five hundred and twenty windows and skylights. Two large staircases flanked the north and south ends of the long, two story central hall where exhibitors from the shoe and leather trade created extravagant hide, skin,

and leather inspired displays. The objective of the building was to promote the skills and collaborative growth between shoe and leather companies from around the world. Exhibitors from worldwide countries displayed animal hides and skins that were uncommon in the American market, and domestic companies used their galleries to promote the leather, shoe, boot, rubber, and allied industries in the United States.²

![Exterior of the Shoe and Leather Building at the 1893 World’s Fair.](image)

Figure 1

Isidore Horween was intent on finding work when he visited the Shoe and Leather Building in 1893. He had apprenticed as a leather tanner prior to emigrating from his home in Ukraine, and the oral tradition is that he disclosed his expertise at the exhibit of a local Chicago tannery—likely W.N. Eisendrath & Co. With confidence in his skills, he told the tannery their leather was good, but he could make it better. By the next week he was employed there.³

Although oral traditions may become altered as they are passed down through generations, they offer important insights into the period in which they took place. Employed in Chicago’s leather industry at the time of the World’s Columbian Exposition were men and women with stories as relatable, yet diverse, as that of Horween’s. By the latter part of the nineteenth century, Chicago’s laboring class consisted primarily of individuals born outside of the United States and their children, who made up seventy-eight percent of Chicago’s population. Though the influx of Eastern Europeans, like Horween, started to shift proportions at the end of the century, approximately one-third of the non-native born population were from German states.⁴

Chicago’s leather industry—consisting of hide dealers, the tannery industry, and leather tradespeople—greatly benefited from having trained tanners in its workforce from such countries as present-day Germany, Russia, Poland, Ukraine, Czech Republic, Slovakia, Lithuania, Austria, and Hungary. In 1890, three years before Horween entered the trade, Chicago’s twenty-one tanneries employed 1,739 people, and many of those who were born in Eastern Europe or German states brought with

³ Horween, discussion.

them tanning techniques that had been mastered over two millenniums in their native homes.5

In fact, leather was interlaced in American life from an early period in the country’s history. From the Puritans in Boston, Massachusetts to the Moravians in Salem, North Carolina, objects made of leather were used in the homes of early settlers across social classes. Additionally, much of the leather that was used in crafting these objects was tanned in similar structured industries to that of Chicago’s in the nineteenth and twentieth centuries. Livestock destined for the food market would be taken to a slaughterhouse that was typically constructed near a flowing water source outside of the community. Once removed from the carcasses, the hides and skins went through the tanning process in a tannery that was often close to the slaughterhouse and positioned on the same flowing water source. Finally, the tanned, or finished, leather would enter the community by way of leather trade shops.

The nineteenth century settlement of immigrants with tanning skills in Chicago did not occur by happenstance. The city was already a center for agriculture in the American West three decades before the opening of the Union Stock Yard on Christmas Day in 1865. Through the sale and slaughter of livestock for food, Chicago’s meatpacking industry produced an ample supply of disembodied hides and skins. As true today as it has been throughout the history of leather manufacturing in America, “the hides and skins used in the manufacture of leather are generally

obtained from animals killed for food.”6 The need to turn the meatpacking by-product into profit and usable goods increased the demand for tanners and leather tradespeople in Chicago. Additionally, the establishment of the Union Stock Yard only amplified financial opportunities. Chicago’s leather industry was physically, financially, and culturally constructed around food labor until the decentralization of the meatpacking industry in the mid to late twentieth century.7

Opportunities in Chicago’s leather industry appeared to present themselves as early as 1826 or 1827 when Archibald Clybourn opened the first slaughterhouse at Fort Dearborn—the army garrison and community that would become Chicago.8 By 1831, John Miller began chemically tanning hides and skins into leather at his tannery near the forks of the Chicago River on the North Branch.9 With an abundant supply of leather and 4,000 residents who needed their feet protected in the newly incorporated City of Chicago, a shoemaker by the name of Samuel Aiken was making and repairing


7 Dominic A. Pacyga, Slaughterhouse: Chicago’s Union Stock Yard and the World it Made (Chicago: The University of Chicago Press, 2015), 169. Starting in the 1920s, the meatpacking industry began to decentralize by moving slaughterhouses closer to producers, rather than remaining near the Union Stock Yard. According to Pacyga, by 1970, around half of the buying and selling of livestock took place directly between meatpackers and ranches/farms. Meatpackers had moved away from the practice of buying meat through stockyards.

8 Pacyga, Slaughterhouse, 30.

leather shoes in his small establishment on Sangamon Street on the west side of the river in 1837.\textsuperscript{10} It is not definitively known whether Aiken was the first shoemaker in Chicago, but he is typically the first leather tradesman who is mentioned in the canon of Chicago’s leather industry. The 1882 publication \textit{The Shoe and Leather Industry of Chicago} credits him with casting “the pebble that started into motion an ever-widening circle of trade.”\textsuperscript{11}

\textit{The Shoe and Leather Industry of Chicago} is one of the earliest publications known to exist that provides a comprehensive view of Chicago’s nineteenth century leather industry. Several periodicals from this time, such as \textit{Hide and Leather}, also survive both electronically and in print in certain special collections at research libraries. The periodicals provide insightful, detailed statistics of the leather market, whereas the publication gives a broad statistical overview of leather in Chicago. Additionally, the publication is particularly unique in the way that it provides biographical histories of individuals and companies engaged in the city’s industry.

There have been few historians or other scholars that have written substantial works on the history of leather, and even fewer on the history of leather in Chicago. However, for those that have, their publications are paramount to understanding the medium’s materiality. English historian John Waterer was the foremost expert of

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\textsuperscript{11} The Shoe and Leather Industry of Chicago: A Review of the Wholesale Manufacturers and Deals in Boots and Shoes; the Tanneries and Dealers in Leather and Findings and Shoemakers’ Supplies; also, the Dealers in Hides, Pelts, etc.; the Leading Harness Makers and Saddlers, and the principal Rubber Goods Houses (Chicago: Reed & Company, 1882), 6-7, Research Center, Chicago History Museum.
leather in the twentieth century. His work *Leather in Life, Art and Industry* (1946) is recognized as the first comprehensive history on leather craftsmanship, and his later books *Leather Craftsmanship* (1968) and *A Guide to the Conservation and Restoration of Objects made wholly or in part of Leather* (1972) provided the foundation for much of the groundbreaking work that occurred in leather conservation in the last quarter of the twentieth century.

On the research of Chicago, Dr. Dominic Pacyga dedicated three paragraphs to the topic of hides and skins coming from Chicago’s nineteenth and twentieth century meatpacking industry—within a larger five pages about other meatpacking by-products—in his distinguished work *Slaughterhouse* (2015). Pacyga received much of the information in those paragraphs from the singular comprehensive book on meatpacking by-products in Chicago, Rudolf Clemen’s *By-Products in the Packing Industry* (1927). Although Clemen’s book is focused on by-products in the years after the scope of this thesis, he skillfully writes about the economy surrounding hides, skins, and leather as by-products of the food industry. Furthermore, William Cronon reproduced a useful table in *Nature’s Metropolis* (1991) that emphasizes the monetary importance of hides and skins to the economic sustainability of meatpacking. Each of the books on Chicago successfully reconstructs the legacy of hides and skins as by-products, but only Clemen addresses the human interaction that is necessary for tanning hides and skins into leather. Prominently absent from the works are recognition of the finished leather products that are made from the slaughterhouse by-product.

Though the growth of Chicago’s early leather industry is credited to Samuel Aiken, the real catalyst was the city’s rapid population growth. As the population
Table 1  Yearly Aggregate Receipts and Shipments of Hides and Skins\textsuperscript{12}

<table>
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\textsuperscript{12} Shoe and Leather Industry, 8-9.
grew, so too did the livestock industry with the increased consumption of meat. Chicago had a population of around 4,000 people when, in 1842, 6,947 hides and skins were reported to have been exported in the earliest mention of the hide business in Chicago. With the average weight of a cattlehide being seventy pounds, the best estimate is that approximately 486,290-pounds of hides and skins were exported that year. Eleven years later and with a population of 60,652 people, 2,396,250-pounds of hides and skins were exported from the city (Table 1).\textsuperscript{13} The leather industry in Chicago had a modest beginning until the city’s population began to increase. Only that of the leather industries in Philadelphia, Milwaukee, New York, and Boston rivaled it domestically by the second quarter of the nineteenth century.

Chicago’s need for more leather outerwear also increased with the growth of its population. In 1839, the city’s leather industry had expanded to include three tanneries, twenty-six boot and shoemakers, six saddlers and harnessmakers, and nine other businesses dealing in leather products.\textsuperscript{14} With the amount of leather tradespeople increasing with its population, Chicago began seeing an influx in the importation of hides and skins (Table 1). The city’s shipment of such material maintained a steady increase throughout this same period in the second half of the nineteenth century. However, 1858 marked the first year that more hides and skins were imported into the city than exported out of it. This trend repeated in 1869 and remained constant for several years until the supply out-produced the demand. The end of this trend was a result of the large meatpacking companies modernizing the slaughtering process by

\textsuperscript{13} Shoe and Leather Industry, 7-8.

\textsuperscript{14} Robert Fergus, comp., Fergus’ Directory of the City of Chicago, 1839: With City and County Officers […]. (Chicago: Fergus Printing Company, 1876), 5-35.
expediting their methods in the late 1870s and advancing refrigeration for shipping dressed meat in the 1880s.\textsuperscript{15}

The reality of more hides and skins being imported than exported between 1869 and 1874 was not due to a struggling meatpacking industry or because of a lack of supply of livestock. Rather, certain leathercraft trades within Chicago’s leather industry became better developed, and, in turn, local and national consumers were expanding the types of finished leather products they were purchasing from the city. The demand for leather products made in Chicago became larger than ever as the city’s reputation for quality grew, and a better developed industry allowed for low cost distribution.\textsuperscript{16}

Gloves were one such product that greatly increased Chicago’s importation of sheepskins in the last quarter of the nineteenth century. Consumers put a high demand on leather gloves from the city’s skilled glovemaking companies, and the industry responded accordingly. Unlike shoes and boots that were often made of plump cattlehide leather, goat/kid and sheep/lamb skins have historically been the leathers of preference for gloves. These skins produce leather—particularly chamois leather made from sheepskin—that is supple, dexterous, and maintains malleability after drying from being wet. Leather from goatskins is often used in gloves made for work because they are more durable, while sheepskin leathers make delicate formal gloves. Leather from both animals has been used by glovemakers in Europe for hundreds of years.\textsuperscript{17}

\textsuperscript{15} Pacyga, \textit{Slaughterhouse}, 107-8.

\textsuperscript{16} \textit{Shoe and Leather Industry}, 6-9.

\textsuperscript{17} John W. Waterer, \textit{Leather in Life, Art and Industry: Being and Outline of its Preparation and uses in Britain Yesterday and Today Together with Some Reflections}
Figure 2  Woman wearing sheep/lamb or goat/kid skin leather gloves and cap. Advertisement by Bemrose & Sons Limited in Commercial Year Book of the Walsall & District Incorporated Chamber of Commerce (Derby, England: Bemrose & Sons Limited, 1916), 161. Image in public domain.

_on its Place in the World of Synthetics Tomorrow_ (London: Faber and Faber Limited, 1946), 197.
With the livestock market for sheep centered elsewhere in the United States, but the market for sheep leather being in Chicago, tanners in the city imported sheepskins with the intention of tanning much of it for the local market. In 1880, 1,400,000 sheep and calf skins were imported into Chicago.¹⁸ In stark contrast, only 335,810 sheep entered the Union Stock Yard that year, and half of those sheep were shipped out of the city alive after being sold—likely to slaughterhouses on the East Coast.¹⁹ With a limited supply from Chicago’s own slaughterhouses, importation was the leather industry’s solution. The ratio of imported sheepskins to calfskins in 1880 is unknown. However, it is anticipated that the leather from the likely large amount of imported sheepskins ended up in the shops of local glovemaking companies. This stock would have allowed glovemakers to make the quantity of gloves consumers demanded and the quality of high-end gloves Chicago would become known for.

Glovemaking was not the only reputable leathercraft trade in Chicago taking advantage of the pliability of sheepskin leather. The shoe and boot trade, which dominated the leather industry through all its existence, used sheep for the upper leather of children’s and women’s shoes. Additionally, the trade produced six hundred styles of shoes utilizing leather tanned from horsehide, cattlehide, calfskin, and goatskin.²⁰ Nearly all of the leather used for shoes and boots was tanned locally in

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¹⁹ Andreas, History of Chicago, 3:335.

²⁰ Shoe and Leather Industry, 6.
Trunkmakers covered the exterior of their products in calf and goat skin leather, while sheepskin leather was used for interior linings. Bookbinders bound volumes of published works in leather tanned from hog, sheep, goat, and calf skin. Tailors used the latter three materials for outerwear. Whip manufacturers utilized relatively thin cattlehide leather, and companies that manufactured leather belting for line shafts in machine shops used thick, heavy cattlehide leather. Saddlers and harnessmakers crafted a number of goods including reins, bridles, girths, shot and dirk belts, saddlebags, and portmanteaus made from a wide variety of leather sourced domestically and internationally. Leather tradespeople in Chicago were also skilled at making leather consumer goods outside of their traditional trade’s name. They crafted leather upholstered seats for furniture and carriages, leather writing surfaces for desks, pocketbooks, coin purses, pouches, fire buckets, hose couplings, baseball gloves, hats, suspenders, and bellows. The finished leather goods produced in Chicago in the nineteenth and early twentieth centuries were not uncommon from those manufactured throughout the East Coast and Mid-West. Some of the products were decorative masterworks and some of them were everyday functional objects.

In Chicago, leather destined to be made into finished products would enter trade shops that, by 1839, had increasingly begun to occupy buildings on Lake Street on the east side of the South Branch of the Chicago River—in a district known as the Loop. Leather merchants and tradespeople would continue to prosper in this area until the Great Chicago Fire of 1871 devastated the Loop, and many of those

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21 Shoe and Leather Industry, 9.
22 Fergus, Fergus’ Directory, 5-35.
individuals lost the buildings that housed their businesses. The tannery industry was relatively unaffected by the fire because many tanneries were located out of the fire’s path on the west side of the North Branch of the Chicago River. Surprisingly, the years of flammable waste that tanneries and other industries had dumped into the flowing water was not responsible for the Chicago River’s inability to stop the fire from burning from its original location on the west side of the South Branch to the east side. The cause of that tragedy was hurricane-force convection currents, or “fire whirls,” that threw the flames to the other side of the river.23

As Upton Sinclair wrote in his famous 1906 book The Jungle, it was not uncommon for waste that had been dumped into the Chicago River to catch fire. The West Fork of the South Branch of the Chicago River, better known as Bubbly Creek, was particularly well known for this event. Waste from a distillery, manure from the Union Stock Yard, sewage from the city, and blood and by-products from slaughterhouses all flowed into the area surrounding Bubbly Creek and dumped into the larger South Branch.24 One can imagine the horrific sight and smell. Meatpacking industrialist Gustavus Franklin Swift Sr. rectified some of this pollution in 1882 when he established a rendering plant that turned meatpacking waste into profitable by-products. As the old Chicago folklore is told, Swift was walking along the banks of Bubbly Creek when he witnessed a steady flow of animal waste rushing from his Swift and Company slaughterhouse into the South Fork. Swift purportedly returned


24 Pacyga, Slaughterhouse, 58.
rather quickly to his plant and made sure that his employees stopped the act so he could turn the valuable waste into profit.\textsuperscript{25}

Although Swift’s epiphanic walk along Bubbly Creek may very well be a myth, his prioritization of meatpacking by-products greatly benefited Chicago’s leather industry. More than that, his desire to turn a profit benefited the city. When the meatpackers began selling slaughterhouse by-products, they cut back on the amount they were polluting the river because there was now little waste for them to throw away. Bubbly Creek would remain a horrible sight and smell from the years of built-up waste—as Sinclair would describe almost twenty-five years after Swift’s first rendering plant—but progress was made.\textsuperscript{26} The city became the metropolis that it did in the nineteenth century because of the river and how Chicagoans used it—both good and bad. Life and success revolved around the waterway, including that of the leather industry. Tanneries contributed immensely to the water’s pollution, but, contrary to popular belief, the flowing stream of the river played a much more vital role in the tannery industry than just as an outlet for dumping waste.

In 1871, city engineers successfully reversed the water current of the Chicago River in an accomplishment that stopped the polluted waterway from flowing into Lake Michigan. This change in the direction of the river brought fresher drinking water to the city by improving the amount of waste that entered the water intake crib

\textsuperscript{25} Pacyga, \textit{Slaughterhouse}, 109.

and its two-mile tunnel that brought water from the lake to the city. However, like Bubbly Creek, years of built-up waste did not rid the water supply of contamination. In a letter dated July 22, 1889, an employee of the Illinois Leather Company in Chicago seemingly wrote of the city’s water,

A few days ago an epidemic of ‘gripes’ and cramps in the stomach seemed to strike this town. My father and brother had a tough of it and two or three men at the factory. The complaint seemed to be general. I guess it was in the water.

Perhaps not a literal reference to the city’s drinking water, the tannery worker’s last sentence may have very well been an idiomatic expression for explaining that the illness going around his family and the factory appeared widespread. Nevertheless, the health and success of Chicago’s tanneries was in the water—just not necessarily in the way the worker was describing.

27 Cronon, Nature’s Metropolis, 249-250.

Chapter 2

‘IT WAS IN THE WATER’

On a sweeping s-curve of the North Branch of the Chicago River stands a multi-structure industrial complex that is clad in weathered, pale pink and buff colored ‘Chicago common’ bricks. The complex is situated on the west bank of the river in Chicago’s Avondale neighborhood, and its backdoors adjoin the top of the embankment where the meandering river lies ten feet below. Late nineteenth and early twentieth century tannery workers employed by J.M. & V. Weil Tanners and their successor to the complex, J. Greenebaum Tanning Co., would have used these backdoors to gain access to the water for use in the tanning process. Today, the doors offer patrons of Metropolitan Brewing’s tap room an escape to the rural nature of the river, without being too far removed from the urban center that dominates the southeastern skyline.

From the top of the embankment in the summer, birds can be heard chirping in the green flora that flank either side of the river. Canadian geese can be seen gliding across the top of the water, and the occasional turtle will poke its head out of the southward flowing current. The water moves at a steady pace that might be best described as methodical. It is slow flowing, but its every movement is deliberate. Beneath the shouting commands coming from passing by rowing teams, the unnatural, yet serene, sound of the all too regular rhythmic ripple of the river’s current is an evident reminder of the manipulation of the Chicago River over time.

Thirteen thousand years ago, as glaciers from the Ice Age began to retreat north past what would become the Great Lakes, water from the melting ice filled the gouges that the glaciers had made on their initial descent south and carved out new
Figure 3  S-curve of the North Branch of the Chicago River behind the J. Greenebaum Tanning Co. (visible on right bank). This industrial complex was first occupied by J.M. & V. Weil Tanners, and today, Metropolitan Brewing occupies a portion of it. This photograph was taken in 1929 near the Belmont Avenue Bridge, looking south. (Courtesy of the Illinois State Archives, Glass Plate Negative #15807x.)

Figure 4  1922 advertisement showing a front perspective of the industrial complex when J.M. & V. Weil Tanners were the occupants. The complex is located on North Rockwell Street in Chicago’s Avondale neighborhood. *(Shoe and Leather Reporter, June 29, 1922, 27.)*
Figure 5  Chicago, 1834. Map depicts the convergence of the North Branch and South Branch of the Chicago River and the surrounding city. (Chicago History Museum, ICHi-037308.)
watercourses. This glacial event created Lake Michigan as well as the affixed Chicago River. The main channel of the river was created by two small streams that converged about a mile from its mouth.\textsuperscript{29} The northern stream became known as the North Branch and it flowed south into the convergence. The southern stream, or the South Branch, flowed north until it met with the North Branch. At the convergence, the water from both tributaries combined to form the Main Stem that flowed east into Lake Michigan. In a letter from 1851, a new resident of Chicago wrote of the city’s arrangement, “Chicago is divided by the river which runs east and west for about ½ of a mile then branches off north and south.”\textsuperscript{30} The author continues, the river divides the city “into 3 parts the north[,] south[,] and west sides.”\textsuperscript{31}

Compared to the waterway humans would make it later in the century, the Chicago River was little more than a stream in 1848. As one traveler described the city and its river in that year,

The city is situated on both sides of the Chicago river, a sluggish, slimy stream, too lazy to clean itself, and on both sides of its north and south branches, upon a level piece of ground, half dry and half wet, resembling a salt marsh, and contained a population of 20,000.\textsuperscript{32}

\textsuperscript{29} Cronon, \textit{Nature’s Metropolis}, 24.

\textsuperscript{30} Margaret to Kate, June 19, 1851, 93x084.8, Letters, Collection 361, The Joseph Downs Collection of Manuscripts and Printed Ephemera, Winterthur Museum, Garden & Library.

\textsuperscript{31} Margaret to Kate, June 19, 1851, 93x084.8, Collection 361, Winterthur Library.

\textsuperscript{32} John Lewis Peyton, \textit{Over the Alleghanies and Across the Prairies: Personal Recollections of the Far West One and Twenty Years ago} (London: Simpkin, Marshall and Co., 1870), 325.
In its natural state the river was never destined to be a great commercial waterway. It was slow flowing, muddy, shallow, narrow, and a seventy-yard wide sandbar made it difficult for large ships to travel through its mouth.\(^\text{33}\) However, the city continued to center around the river as Chicagoans persistently used the waterway for their commercial needs.

In 1835, Chicagoans completed a crucial modification to the waterway when they dredged a channel through the sandbar at the mouth of the river that was “two hundred feet wide and three to seven feet deep.”\(^\text{34}\) The completion of this undertaking allowed for larger ships to travel upriver, further into the interior of Illinois. Thirteen years later, in 1848, the State of Illinois opened arguably their most ambitious project to date, the Illinois and Michigan Canal. Canal workers dredged ninety-six miles southwest into the Illinois interior for the purpose of connecting the South Branch of the Chicago River to the Illinois River. This human-made waterway successfully linked the Great Lakes to the Mississippi River. Steam ships carrying passengers and tradable goods on Lake Michigan could travel upstream through the canal, traverse downstream through the Illinois River, and then navigate into the Mississippi River to St. Louis, New Orleans, or any number of the river’s ports. The canal allowed for travel to be conducted the opposite direction as well.\(^\text{35}\)

Chicago engineers further altered the Chicago River when, in 1871, they remarkably reversed its flow. Rather than water in the Main Stem flowing east into


\(^{\text{34}}\) Cronon, *Nature’s Metropolis*, 56.

\(^{\text{35}}\) Cronon, *Nature’s Metropolis*, 63-64.
Lake Michigan, the current was made to flow west into the South Branch and then southwest through the Illinois and Michigan Canal. This feat was made in an attempt to flush the Chicago River’s polluted water out of the city and Lake Michigan. Until this point in history, all the waste being dumped into the river by Chicago’s meatpacking industry, tannery industry, iron and steel industry, distilleries, and the city’s sewer system, had been culminating in Lake Michigan—the city’s primary source for drinking water. As industrial production increased in the second half of the nineteenth century, so too did health and safety concerns which prompted the reversal of the river. Concerns about the badly polluted water were passed from Chicagoans to those living downstream toward the Illinois River. William Cronon wrote it best when he stated, “out of sight, out of smell, out of mind.”36

Chicagoans also made smaller scale modifications to the Chicago River in the intervening years. Short forks were dredged off the North and South Branches, and, with the Main Stem, the two tributaries were widened and deepened. Though the North Branch never experienced a modification as drastic as a reversal in flow, Goose Island—a one-hundred-and-sixty-acre human-made landmass—was artificially formed on the branch. Portions of the river were changed to curve and conform to the industrial complexes that lined its banks, so the water could be used to the benefit of industrialists. Every movement of the water in the Chicago River was crafted to have a purpose.37

36 Cronon, Nature’s Metropolis, 249.
Humankind’s desire to manipulate the Chicago River was, however, not enough to make it as lucrative a commercial waterway as the Mississippi, Delaware, or Hudson Rivers. The natural landscape that Chicago was built upon is unforgiving, and the modifications that were made to the river often had varied results as the seasons changed. Furthermore, the Illinois and Michigan Canal never achieved its high national ambitions. The canal did prompt a drastic change in the regional economy by increasing the sales of crops grown in the state, but interest in the waterway waned in the second half of the nineteenth century. By the Civil War, Chicagoans had turned their full attention to developing the commercial transportation method that truly revolutionized their ability to access the western United States, the railway systems. The Chicago River acted first as a competitor to the railways and later as their compliment. Together, the two transportation methods helped make Chicago a commercial center in the American Mid-West.

Although the Chicago River was never commercially significant from a national perspective, it was the beating heart of the city’s industrial corridor in the nineteenth and early twentieth centuries. Local industries such as lumber, grain, and meatpacking reaped the benefits of the heavily modified waterway from their advantageously situated industrial complexes on the banks of the river. Chicago’s tanneries were quick to join their ranks as the industry formed around the river. As merchants and tradespeople who dealt in finished leather products began to center


40 Cronon, *Nature’s Metropolis*, 70.
around Lake Street in the Loop, tanneries organized themselves among the other industries along a ten mile stretch of riverfront, predominantly on the West Side. It was here where tanners and other workers in the tannery chemically transformed hides and skins into a new compound, leather, that was “permanently imputrescible whilst, at the same time, preserving the natural fibrous structure from which ultimate strength and pliability are derived.”\textsuperscript{41} To their east, the tanneries were wedded to their most important resource, the South and North Branches of the Chicago River. After 1865, the square mile of land that was the Union Stock Yard and Packingtown marked the southern point of the industry. Westward stood cottages occupied by the working-class, and even further west into the interior of Illinois lay mile upon mile of agricultural land that was seemingly untouched by Chicago’s vast urban growth. To the north, residential neighborhoods and white-collar businesses separated themselves from the haze of industrial smoke.

Nestled near or within these boundaries were several industry-dependent neighborhoods that were integral to the tanning process. The animal by-product of hides and skins flowed along the river from south to north, starting with their separation from slaughtered animals at slaughterhouses in the meatpacking district known as Packingtown.\textsuperscript{42} This district was also the southernmost point of Chicago’s tannery industry. The large meatpacking firms of Armour and Company and Swift and

\textsuperscript{41} Waterer, \textit{Leather in Life}, 126.

\textsuperscript{42} Pacyga, \textit{Slaughterhouse}, xvi. According to Pacyga, Chicagoans have often called Packingtown and the Union Stock Yard as ‘the yards.’ He further defines Packingtown as the area west of the Union Stock Yard that once had a large concentration of slaughterhouses and other meatpacking facilities.
Company operated tanneries in their Packingtown complexes. With the exception of those that went straight to such tanneries, the next stop for hides and skins on their way to becoming leather was northeast of Packingtown in the Loop or on the North Side of Chicago. It was here where the animal by-product entered the possession of fellmongers or, more broadly, hide dealers. Many of these middlemen ran their businesses near the tradespeople on Lake Street or just north of the Main Stem on Kinzie Street. Once the dealers sold the product to local tanners, the hides and skins were transported across the river to tanneries on the West Side. They entered tanneries as far north as the Weil and Greenebaum factory and as close south as the Fulton-Randolph Market District in the West Loop.

Interwoven within these industrial neighborhoods were the residential communities in which workers in the leather industry lived. In the nineteenth and early twentieth century, these communities often represented ethnic enclaves that were formed around places of worship that had been established by early immigrants of the community. Many of these religious centers were Jewish synagogues or Roman


44 “Hide Markets,” Hide and Leather, April 25, 1891, 17.
Catholic, Protestant, and Orthodox Christian churches. As author Donald Miller states, these communities “kept an uprooted people in touch with their history and language and kept them together as a community through struggle and pain.” Such communities north of the Union Stock Yard and Packingtown on the West Side included the settlement of Bohemian/Czech Americans in the geographical neighborhood of Pilsen, Italian Americans in Little Italy, and Greek Americans in Greektown. Continuing north of the Fulton-Randolph Market District, near Goose Island, Ukrainian Americans resided in Ukrainian Village, and a large community of Polish Americans occupied an area known as Polish Downtown in parts of the Pulaski Park, Wicker Park, Bucktown, East Village, Noble Square, and River West neighborhoods.

It is essential to realize that in many instances the ethnic groups represented in the place names of neighborhoods and streets were not the first settlers of the area. Furthermore, place names did not represent every ethnic community living within a geographical neighborhood. The distinction between the terms community and


46 Miller, *City of the Century*, 462.

Figure 6  Detail, 1926 map showing industrial areas, transportation, and ethnic communities. Solid black indicates railroad property and the shaded lines indicate industrial property. The thin wavy line on the right is the South Branch. Bohemian, Lithuanian, and Polish communities occupied the neighborhood of Pilsen. Little Italy is depicted by the Italian community and Greektown by the Greek community. The Jewish and Dutch communities occupied the neighborhoods in-between. (Social Base Map of Chicago. Courtesy of the Special Collections Research Center, University of Chicago Library.)

Figure 7  Detail, 1926. Polish community occupied Polish Downtown and other neighborhoods. The Jewish community illustrated Ukrainian Village and the Italian community depicted West Town. (Social Base Map of Chicago. Courtesy of the Special Collections Research Center, University of Chicago Library.)
neighborhood is vital. Residing among the geographical neighborhoods of Ukrainian Village and Bucktown were also ethnic communities of Germans Americans, Norwegian Americans, and Russian Americans. According to Pacyga, “although different ethnic groups shared the same geographic space they did not necessarily interact with one another socially or emotionally…Each group lived without interference.”

East of Ukrainian Village and Polish Downtown, Goose Island and the surrounding banks of the river experienced the largest concentration of tanneries in Chicago between 1886 and 1917. Known locally as the Tannery District, factories in this area chemically changed hides and skins into some of the finest leather in the world during this time. The tannery industry’s growth on and near Goose Island by the 1880s did not occur by happenstance. In that decade, several tannery owners resided in the neighboring Polish Downtown and Ukrainian Village. As increased prosperity allowed tannery owners to move to other parts of the city in the 1890s, they remained closely connected to the working-class population in the communities they left. Much of the working-class in those areas continued to hold strong cultural ties to the leather tanning trade. Furthermore, a well-established railway system on the island allowed hides and skins to be transported into the district and finished leather to be shipped out. Finally, the island had been carved out by the North Branch of the Chicago River


Figure 8  Detail, 1888 map showing Goose Island and the surrounding area. The waterway to the west of the island is the North Branch of the Chicago River, and the waterway to the east is the man-made North Branch Canal. (Rufus Blanchard, Index Map of Chicago: Running South to Seventy First Street [Chicago: Rufus Blanchard, 1888]. Courtesy of the Special Collections Research Center, University of Chicago Library.)
to its west and the man-made North Branch Canal to its east. With Chicago being the dominant lumber market on Lake Michigan, tanneries imported hemlock bark from the state of Michigan at a low cost via boat. The ability to access both banks of the island and both banks of mainland Chicago by water allowed bark filled vessels to float directly to the backdoors of each tannery.51

The bark of Michigan’s hemlock trees acted as the primary plant ingredient for vegetable tanning in Chicago tanneries between 1886 and 1917. Vegetable tanning dates to antiquity and is the process of soaking hides and skins in water that is infused with plant material containing tannin.52 Not only was the importation of hemlock bark financially sustainable in Chicago, but it produced tanning liquor—the liquid in which hides and skins soak that chemically alters the material into leather—that tanned a quality of leather appropriate for the market in the city.53 The state of Illinois’ tannery industry consumed 50,762 tons of hemlock bark in 1880, as compared to only 137 tons of oak bark—another common plant material used in vegetable tanning.54 In the


52 Waterer, Leather in Life, 140.

53 Correspondences of Harry Flanders, Series 1, Harry Flanders papers, Research Center, Chicago History Museum. A company attempted to persuade Harry Flanders to move his tanning operations closer to the source of hemlock in Michigan. Flanders ultimately remained in Chicago.

nineteenth and early twentieth centuries, there was a misconception in the United States that hemlock produced coarse finished products and inferior leather to that of oak. However, as leather expert Allen Rogers stated of hemlock bark,

> As far as North America is concerned, it has been the tanning material par excellence, and probably the only one with which it is possible to produce excellent leather of all kinds. It seems as well adapted for the lightest colored fancy or upper leather as for the heaviest sole.

The bark would have arrived at tanneries as either chips or in a milled state. It then would have then been leached in tanning vats filled with water, allowing the tannins—the primary tanning agent—to extract and lixiviate with the liquid. Over a span of several months to more than a year, the unhaired and fleshed hides and skins would have been transferred from one vat to another, gradually being exposed to stronger concentrations of tannin. The liquor, produced by the combination of hemlock bark and water, is a vibrant red that plumps the material and imparts its color to the finished leather.

With their backdoors adjoining the embankment, tanneries and their owners exploited the flowing water of the Chicago River to their advantage by using it for waste disposal and for establishing factories close to communities that had formed around the waterway with workers trained in the tanning trade. They also used the river as a natural barrier between working-class residential communities on the West


56 Rogers, *Practical Tanning*, 547.

Side and job opportunities east of the North and South Branches. Finally, tannery owners utilized the flowing water of the river for the importation of raw materials and exportation of finished products. It is as an active agent in tanning process, however, that the Chicago River plays its most vital role to the city’s tannery industry. As essential to the tanning process as bark and its tannin extracts are, so too is the liquid in which the compound becomes soluble, water. Chicago’s tannery industry was highly dependent upon the Chicago River’s water. The sources of vegetable tannins in the United States have changed significantly over the past two hundred years, but water was, and still is, a constant active agent in the tanning process—not a passive ingredient. Yet, as an object, water has often been overlooked in the canon of tannery trade catalogs, tanning manuals, and chemical studies of the tanning process.

The chemical reaction water contributes in the tanning process is thoroughly understood by those in the trade, but its influence on the finished material has been interpreted only loosely. The most relevant study of water as a material in the tanning process is that of Rogers’, in which he states in part, “It is quite evident that chemical control of the tannery should start with an analysis of the water that is to be used in practically every operation which the hides undergo while being made into leather.”

The need for large amounts of water in the tanning process was what prompted John Miller and other early tanners in Chicago to begin the strategic trend of constructing tanneries on the banks of the North Branch of the Chicago River. According to an 1852 study on the trade of tanning,

This [washing and soaking] is the first operation that the skins must undergo, and it is therefore a great convenience to have the tannery

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located upon, or near to a stream or running spring, with an abundance of water... If the water is abundant and the current rapid, time and trouble will be saved by planting stakes, or a kind of rack across the stream, and so fastening the skins thereto that the friction of the water may loosen the dirt and carry it off. Care should be taken to suspend the skins so that they may not be damaged by rubbing against the stones at the bottom of the stream.59

The close proximity of tanneries to the North Branch enabled the tanners and their workers to transport hides and skins only a short distance to wash the animal by-product in the flowing water. It also allowed them to transport fresh river water a short distance back to the tannery for the remaining process.60

The placement of tanneries along a river can be seen in early tannery industries across the United States. In many cases it is due to river water being the purest water, or containing the least soluble matter, readily available to tanners. Rogers notes, “As a general statement, the purer the water the better it is suited for use in the tannery.”61 In Chicago, the North Branch’s water was the purest for tanning in the city’s early history. With its headwaters being in rural northern Illinois, humans had little impact on the tributary until it reached the city. As the water traversed south it also deposited impure suspend matter, such as mud, along the river bed.62 Moreover, industrial waste had little impact on the tanner’s water source as a result of the tannery industry being situated upstream from much of Chicago’s industry. The limestone content of the river bed—in which the aforementioned ‘Chicago common’ bricks that built much of

59 Morfit, The Arts of Tanning, 154-5.
60 Morfit, The Arts of Tanning, 154-5.
61 Rogers, Practical Tanning, 585.
62 Morfit, The Arts of Tanning, 159.
Chicago’s nineteenth century skyline are partly made of—does, however, taint the purity of the water due to the limestone’s soluble nature.\textsuperscript{63} By 1886, modern tanneries were likely to have been fitted with pipes that transported water directly from the Chicago River into the tannery.

It cannot be determined when tanneries in Chicago first began to receive tap water via pipes from Lake Michigan. The best assumption is that it occurred around the turn of the century when a large number of suburban areas were being annexed to Chicago. In order to supply the citizens of these newly incorporated townships with drinking water, Chicago significantly expanded its water system by constructing new pump stations, water supply tunnels, and water intake cribs in Lake Michigan.\textsuperscript{64} The transition from river water to lake water would have been quite noticeable to Chicago tanners. Due to the water intake cribs being two miles from a flowing current, the water surrounding the cribs would be in a state of constant rest. This would have made the lake water “more highly charged with the soluble principles of the soil,” rendering it less pure. Finally, in 1916, Chicago’s tap water became more chemically predictable with the introduction of chlorine into the water system as a disinfectant.\textsuperscript{65}


In Chicago, tanneries continued to operate into the late twentieth and early twenty-first centuries, far beyond the financial viability of the local market. Many of these tanneries with origins in the nineteenth century, such as Gutmann & Co., Weil & Eisendrath Tanners, and Chicago Rawhide Manufacturing Co., likely remained in the city in large part due to how their tanning recipes chemically reacted to Chicago’s water to produce a desired leather. The city’s water, combined with bark tannins, produced a liquor that tanned hides and skins specific to Chicago but varied from one local tannery to another depending on the tanning recipe. As Waterer noted on this topic,

As skill in tanning increased it was found that quality as well as quantity of water was of great importance, affecting to a considerable extent the character of the finished leather through variations in temperature, chemical impurities and bacterial content. Certain tanneries, owing to their water supplies, were able to produce leather of different character and quality from that made elsewhere.66

The finished leather produced in Chicago would have had a certain quality and character that many tanneries built their reputations on. Local tanneries that followed the market away from Chicago—whether it be overseas or in the continental United States—would have had to spend valuable time and resources on chemically adapting their recipes to their new water source, and they would have never produced the same leather that they did in Chicago. Even though modern methods of water treatment have significantly stabilized the content of city water, the last operating tannery in Chicago—which formulated its first tanning recipe over one hundred years ago—continues to monitor water content and gradually adjusts their recipes with even the

smallest chemical alteration. If the slightest change is not accounted for, their consumers have historically been able to note the difference in their finished products.\textsuperscript{67}

It is challenging to interpret the quality and character of leather produced in Chicago between 1886 and 1917. Few material examples are believed to exist, and if they do, it would be difficult to attribute the leather to a specific tannery. Leather is unlike the chair in whose seat it upholsters, a tanner rarely, if ever, leaves behind any indication of its maker and connoisseurs have not spent years attributing characteristics of leather to certain tanneries. What does exist from this time period is a tanner’s account book, tannery and leather product advertisements, and a thriving tannery. These are what will reconstruct the material legacy of Chicago’s leather industry.

\textsuperscript{67} Horween, discussion.
Chapter 3
THE TANNER: W.N. EISENDRATH

In his testimony before the United States Senate Select Committee on the Transportation and Sale of Meat Products, on November 30, 1889, meatpacking magnate Philip Danforth Armour gave the following estimate of the dressed beef market and its by-product industry,

A dressed-beef man buys a steer weighing 1,260 pounds at $3.25 per hundred weight, which costs him $40.95. The animal will dress at from 54 to 58 per cent. of its live weight. The steer will give, say, 710 pounds of dressed sides, and such a carcass will be sold in New York at 5-3/8 cents per pound, or $38.17. Deduct the freight on 710 pounds at 45 cents per hundred weight, and allowing 35 cents per hundred weight, selling charges, we have left for the carcass $32.49, which is $8.46 less than the original cost of the animal. The hides, horns, hoofs, tongue, liver, heart, tallow, oleo, fat, intestines, blood, and offal remain, from which we must make up this deficiency. Pay the cost of killing and refrigerating, fuel, salt, labor, buying, driving, utilizing offal, etc., which is about $1.75, and get his profit. The hide (70 pounds at 9 cents) will bring $6.30. The remaining deficiency, together with the cost of killing and whatever profit is made, comes largely from the products, which are absolutely a waste to small butchers. The value of the hide and these waste products may be fairly stated at from $10.50 to $11.00, so that from the sale of such an animal he [dressed-beef man] would have a profit of about 60 cents.68

With the steer’s hide valued at around sixty to fifty-seven percent of the yield from all by-product sales, meatpackers could only turn a profit on this transaction, and the sale of other livestock, by selling the animals’ hides and skins. The meatpacking industry was as dependent on the leather industry’s consumption of hides and skin, as the

68 Testimony, November 30, 1889, Before the Select Comm. on the Transportation and Sale of Meat Products, 51st Cong. 424 (1889) (statement of Philip Danforth Armour, Beef and Pork Packer of Armour & Co.).
leather industry was on the meatpacking industry’s supply of such material. It is possible the two industries would not have survived or been as successful without the other in late nineteenth and early twentieth century Chicago. They were dependent on each other and the city they coexisted in. Chicago provided an ideal environment for the industries to thrive with its advanced rail and water transportation system, vastly growing working-class immigrant population, ability to annex land for large industrial complexes, and geographic location between the western and eastern states.

Philip D. Armour, Gustavus F. Swift Sr., and Nelson Morris were three

Table 2  Armour’s Estimates of Dressed Beef By-product Costs and Profits

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steer, 1,260 lbs @ $3.25 per cwt* (becomes 710 lbs dressed beef)</td>
<td>$40.95</td>
</tr>
<tr>
<td>Cost of killing, processing, salt, icing, etc</td>
<td>$1.75</td>
</tr>
<tr>
<td>Freight on 710 pounds @ $0.45 per cwt</td>
<td>$3.20</td>
</tr>
<tr>
<td>New York selling charges @ $0.35 per cwt</td>
<td>$2.48</td>
</tr>
<tr>
<td>Cost of purchase, processing, and transport</td>
<td>-$48.38</td>
</tr>
<tr>
<td>Sale in NYC of 710 lbs dressed beef @ 5-3/8 ¢ per lb. (Net loss</td>
<td>$38.17</td>
</tr>
<tr>
<td>(Net loss on dressed beef in NYC)</td>
<td>-$10.21</td>
</tr>
<tr>
<td>Sale of hide, 70 lbs @ $.09 per lb</td>
<td>$6.30</td>
</tr>
<tr>
<td>Sale of by-products</td>
<td>$4.50</td>
</tr>
<tr>
<td>Yield from all by-product sales</td>
<td>[$]10.80</td>
</tr>
<tr>
<td>Net profit from all transactions</td>
<td>$0.59</td>
</tr>
</tbody>
</table>

*Hundred-weight

69 Cronon, *Nature’s Metropolis*, 251. Cronon constructed this table from the testimony of Philip D. Armour. The rounding errors made by Armour in his original testimony produced results that were not exact calculations. Cronon retained all of the original estimates except for the net profit, which he changed from ‘about 60 cents’ to the more precise $0.59.
Chicago meatpackers who procured an immense amount of wealth from the lucrative packing industry and its relationship with the leather industry. There to turn a profit on the leather side of the association was one such tanner named William Nathan Eisendrath Sr. (W.N. Eisendrath). Though Eisendrath may have amassed the largest wealth of any tanner from Chicago’s leather industry in the late nineteenth and early twentieth centuries, his estate was grossly surpassed by that of the aforementioned meatpackers. When Armour passed away on January 6, 1901, his fortune was estimated to be as high as $50,000,000.  

Swift’s estate was believed to have been between $7,000,000 and $10,000,000 upon his death on March 29, 1903. And at the time of Morris’ passing on August 27, 1907, his estate was estimated to be $20,000,000. In considerable contrast, when Eisendrath passed away nineteen years later, on December 9, 1926, his fortune was estimated to total $2,500,000.

The two industries produced two different classes of fortunes, and William Eisendrath and his wife Rose Loewenstein were of the upper stratum in the leather industry. W.N. was born in Chicago on December 5, 1853 to Nathan Samson

70 “Philip D. Armour is Dead: Chicago Millionaire Passes Away After Two Years’ Illness,” New York Times, January 7, 1901, ProQuest Historical Newspapers.

71 “Gustavus F. Swift Dead.: Head of Big Packing Company Dies from Internal Hemorrhages,” New York Times, March 30, 1903, ProQuest Historical Newspapers.


Eisendrath and Helena Fellheimer. His father had twenty-three siblings, and, in 1848, was the first of nine brothers and sisters to emigrate from Dorsten, Germany to the United States. By 1853, Nathan had settled in Chicago where William was born. W.N.’s father was a manufacturer by trade. He owned a calico printing and dying factory in Dorsten, and in the United States he was involved in soap and candle manufacturing, brick making, distilling, and banking. Nathan had amassed enough wealth in his new home that, by the 1870s, William and four of his brothers received several years of education in Europe.

It is likely that W.N. became familiar with the tanning trade through his uncles who operated tanneries outside of Dorsten before they immigrated to Chicago. David Eisendrath may very well have been the uncle W.N. apprenticed under in the trade, as he was the only family member to continue in the tanning business in Chicago. According to an unpublished family history, after arriving in the United States in 1865, David “became prominent as a tanner, and in his factory on the North West side


75 Ruth Eisendrath, “The Eisendrath Family” (unpublished manuscript), June 10, 1929, box 253, folder 24, page 14-21, Ernest Watson Burgess Papers Addenda, Special Collections Research Center, University of Chicago Library.

76 Eisendrath, “The Eisendrath Family,” page 17, University of Chicago Library.
he was one of the first manufacturers to color his leather which he made from calves’ and sheeps’ skins.”

The factory in which David operated his tannery was presumably a short distance from his West Side home on Fifth Street, now known as Sangamon Street. It is possible that W.N. and his cousin Benjamin David Eisendrath (B.D.)—David’s son—took this factory over when they went into the business of tanning glove leather in 1875. It is known that their West Side tannery was located south, across the river from Goose Island on the bank of the North Branch and was situated between Sangamon and Peoria Street—known at that time as Dix Street. Of this factory, their nephew Samson Julius Eisendrath recalled,

And then in 1875...B.D. and W.N. Eisendrath started their Eisendrath Glove factory right opposite our house [on Sangamon Street]. I used to go and help them, although I was then only a little shaver--not more than five years old. You can imagine what my help was worth,--I can’t remember what my pay check was at that time. Once when going through the tannery, I ran into a big splitting knife and nearly cut my leg off!

By 1894—after the partnership had dissolved and W.N. took full control of the operations—the company was believed to be the largest tanners of horsehides in the United States. In three, four-story buildings, the tannery was producing fourteen

77 Eisendrath, “The Eisendrath Family,” page 18, University of Chicago Library.

78 Eisendrath, “The Eisendrath Family,” page 20, University of Chicago Library.


80 Eisendrath, “The Eisendrath Family,” page 24, University of Chicago Library.
thousand sides of calfskin, kipskin (between the age of a calf and mature bovine), and horsehide leather per week. The industrial complex had substantial docking facilities from its position on the bank of the river, and the tannery also benefitted from having its own private railroad switch that was connected to the expansive railway system of the Chicago and North Western Railroad. The leathers W.N. manufactured, “for hand and foot, stand high in the leather market, owing to their character and honesty. It is generally admitted that for elegance and finish they are unexcelled.”

81 Eisendrath, “The Eisendrath Family,” *Hide and Leather* insert, University of Chicago Library.
The dissolution of the partnership between W.N. and B.D., in 1886, was anything but amicable. W.N. writes of it in his account book on March 8, 1886,

He [B.D.] at once tells me that it had been his intention that our firm even with the brothers Joe & Sam out, cannot be continued and he had fully concluded that we shall buy no more raw stock but gradually finish up all our stock, sell it out and then divide the Real Estate etc. This took me by awful surprise and after pro and con arguments, offers to buy or sell, culminates in my buying out his interest.82

As events in the following days unfolded, W.N. even went as far as feeling that his cousins had been “working under the guise of ‘friends’.”83 By March 12, 1886, the papers for dissolving the partnership had been signed and submitted. Of this moment W.N. stated, “and the firm of W.N.E. & Co. continues.”84

B.D. eventually moved to Racine, Wisconsin where he established a successful tannery, and it is clear from the state of W.N.’s weekly production in 1894 and the size of his factory that he too prospered after the dissolution. W.N. Eisendrath & Co. became incorporated between December 1892 and January 1893, and W.N.’s success was likely due in many ways to his innovative inclination and willingness to adapt his tanning techniques with the advancing technology of the late nineteenth century.85


84 Eisendrath account book, page 8, Eisendrath Family Papers, The Newberry Library. By 1909, W.N. Eisendrath was listed as the president of a tannery by a different name, the Monarch Leather Co. In 1899, he helped to organize the large leather trust American Hide and Leather Company of which W.N. Eisendrath & Co. became part of.

article that appeared in the magazine *Hide and Leather*, in 1894, stated that he was a “shrewd, far-seeing manufacturer.” Eisendrath’s evaluation of W.N. is made evident on one of the opening pages of his account book where, in 1886, he had attentively penned a verbatim copy of Joseph A. Dietz’s new United States patent for the processing of making leather waterproof. The patent initially calls for the leather to be soaked in cold water and then half-dried. Next it instructs the applier to first sponge the leather with a mixture of hot water and lead, and then a mixture of hot water and alum.

Eisendrath would have used this waterproofing recipe for both shoe and glove leather. It appears that for shoe leather his tannery was primarily tanning calf skins, kip skins, and horsehides. With horsehides, he and his workers were tanning shell cordovan leather which is produced from the section of the hide that covered the buttocks of the horse. This leather would have been used for the upper leather of shoes. As Campbell Morfit noted in 1852, horsehides “make excellent material for uppers, and the legs of boots.” On the process of tanning horsehides in the mid-nineteenth century, he quotes two tanners as stating,

> The skins are soaked for a night [in water], and then passed successively through three [water based] lime-pits, remaining one day in each, the fresh pit being charged in the proportion of 20 bushels of lime for 140 skins. Having been taken out and thoroughly washed in

86 Eisendrath, “The Eisendrath Family,” *Hide and Leather* insert, University of Chicago Library.


running water, they are worked in the usual way upon the beam, and then passed through the [tanning] vats.90

According to this method, the horsehides pass through four tanning vats, and the process may take anywhere from fifty days to eight months or longer. Once the material is removed from the vats, the now tanned hides are rubbed on a marble table—both flesh and grain side—and then hung from hooks to half-dry before being sent to the currier slightly damp.91

Figure 10 A tannery worker standing behind two wooden frames that have leather tied to them. This photograph was taken when the leather was in the later stages of the tanning process, c.1900. (Courtesy, the Winterthur Library: Joseph Downs Collection of Manuscripts and Printed Ephemera.)


W.N. Eisendrath’s tannery was also tanning horsehides for glove leather, in conjunction with sheep, goat, and calf skins for the same purpose. Their horsehide work gloves are what the tannery became well-known for around the turn of the twentieth-century (Figure 14-16). This leather was described as being, “a beautiful, soft material, smooth as velvet, soft as silk and tough as rawhide.”\textsuperscript{92} Additionally, the tannery produced horsehide leather that imitated buckskin and was used in making gloves and sporting goods gear such as shooting coats designed for hunting.\textsuperscript{93}

Trial and error came along with W.N.’s innovative nature, but he persisted in improving his tanning methods when they were imperfect. One of the forces that caused W.N. and B.D. to dissolve their partnership was B.D.’s claim that he did not know how to tan their kid skin stock—skin of a young goat—into leather. According to W.N.’s account book, it was at this moment that B.D. proposed that they stop their tanning operations. In response to his cousin’s proposal, W.N. wrote that he told B.D., “I intend to make it even if [the] skins at first should not be all right.”\textsuperscript{94}

It was this tenacious character that kept W.N. on the cusp of tanning innovation throughout the later part of the nineteenth century and into the twentieth, as major technological advances transformed the tannery industry. During this time, tanners were beginning to utilize a wider range of tanning materials, new dyeing methods were being practiced, and machines—such as the motor-driven rotating

\textsuperscript{92} Eisendrath, “The Eisendrath Family,” \textit{Hide and Leather} insert, University of Chicago Library.

\textsuperscript{93} Eisendrath, “The Eisendrath Family,” \textit{Hide and Leather} insert, University of Chicago Library.

\textsuperscript{94} Eisendrath account book, page 6, Eisendrath Family Papers, The Newberry Library.
tanning drum—were evolving. W.N. capitalized on the transfer of leather tanning knowledge from the Eastern United States to the West, using proven tanning techniques from leather manufacturing centers on the East Coast in his Chicago tannery. These kept the quality of his leather above that of his competitors. One such example was his introduction of the dongola leather tanning process in Chicago.

Upon hearing the success of dongola tanned leather on the East Coast in the early 1880s, Eisendrath visited James Kent—one of the early tanners to employ the technique in America—in Gloversville, New York to learn “the secret of making dongola leather, a secret which has revolutionized the upper leather industry in less than ten years.” Named after a town in Sudan, Africa, dongola leather was a combination tanned leather that utilized both vegetable and mineral tannage. It was primarily used in tanning kid, goat, sheep, and calf skins. Traditionally, the skins were tanned in a single vat solution using only three ingredients, gambier, alum, and salt. Gambier is a plant extract that comes from the *uncia gambir*, and it would have produced the vegetable tannage in the dongola leather tanning process. At the

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96 Eisendrath, “The Eisendrath Family,” *Hide and Leather* insert, University of Chicago Library.

97 Eisendrath, “The Eisendrath Family,” *Hide and Leather* insert, University of Chicago Library. The city of Gloversville received its name from its large glove industry. Gloversville remained the center of the glove industry in the United States until the late twentieth century.


time Eisendrath was tanning with the material, it would have been imported under the name terra japonica from such countries as Malaysia, Cambodia, and China.\textsuperscript{100} The alum and salt created the mineral tannage. The washed skins were first placed in the gambier liquor and moved around with a paddle, which allowed the skins to absorb the liquor uniformly. Next, alum and salt were added to the liquor once the skins had been struck through by the gambier. The tannery then paddled the skins, either manually or with a paddle wheel, for several hours to a couple of days. After the proper time had passed, the tanning liquor produced a leather that was soft yet durable.\textsuperscript{101}

Figure 11  W.N. Eisendrath & Co.’s ‘Tiger’ trademark. (Eisendrath, “The Eisendrath Family.” Courtesy of the Special Collections Research Center, University of Chicago Library.)

\textsuperscript{100} Rogers, \textit{Practical Tanning}, 68.

\textsuperscript{101} Rogers, \textit{Practical Tanning}, 237.
W.N. Eisendrath’s tannery used the dongola tanning process to tan calf and kip skins that imitated kangaroo and Russia leather for shoe uppers. In the 1894 *Hide and Leather* article, the author states of the tannery’s dongola imitation kangaroo, “It is said that some of the leading shoe manufacturers prefer ‘Tiger’ kangaroo calf to the genuine kangaroo – another example of the beneficent effect of a good trade mark.”

The trademark in conversation is that of Eisendrath’s tiger (Figure 11). A shoe manufacturer in Chicago was purportedly so satisfied with W.N.’s dongola leather that he advised the tanner to build a trademark around the product, such as a tiger. The shoe manufacturer is reported to have said, “‘Not only does your leather remind me of the toughness and strength of a tiger, but it seems to take hold of your customers with a clutch that is not easily shaken off’.” It is from this encounter that W.N. allegedly developed the tiger trademark that began being stamped on the tannery’s leather.

Like other tanneries that stamp their trademarks on the leather they produce, Eisendrath likely stamped the tiger on the flesh side of the leather. With leather being a rather ephemeral material and the flesh side not often visible in finished products, no example of leather bearing Eisendrath’s tiger trademark is found to exist today.

The masculine nature of both the tiger trademark and the shoe manufacturer’s quote about W.N.’s dongola leather has been perpetuated in the United States tannery

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102 Eisendrath, “The Eisendrath Family,” *Hide and Leather* insert, University of Chicago Library.

103 Eisendrath, “The Eisendrath Family,” *Hide and Leather* insert, University of Chicago Library.

104 Eisendrath, “The Eisendrath Family,” *Hide and Leather* insert, University of Chicago Library.
industry throughout much of its history. It is difficult to find pre-1860 tannery records that list women workers by name, and, until the mid-twentieth century, women are often physically missing in the photograph documentation of tanneries—in such resources as trade catalogs. Additionally, leather products were heavily marketed towards men prior to the twentieth century. In 1894, the newest leather W.N.’s tannery was producing was marketed as “‘Sandow’ kid,” which was named after the late nineteenth and early twentieth century male German bodybuilder Eugen Sandow. At the time, it was believed that Sandow had reached “the ideal perfection of his physical manhood,” and W.N.’s new kid stock was reported to be a “fine leather” that had “a smooth, soft finish, combined with the qualities which have made Sandow, the athlete, famous.”

Although the marketing of leather was often masculine in nature, women were working in tanneries in the nineteenth century. In 1852, one hundred and two women were working in the tannery industry in the United States. With their combined monthly wages totaling $970, these women were making on average approximately

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$9.51 per month. As expected of the time, these numbers are significantly disproportionate to those of the men working in the industry. Both the number of men working in tanneries and their monthly wages were more than two hundred times larger than that of the women, and on average, men were making around $19.91 per month. The lone women working in a tannery in North Carolina was earning $4 per month, and, on the highest end, the average monthly wages of the thirty-two women working in Massachusetts was $11.50.\textsuperscript{108} However, even more so than in tanneries, women occupied prominent spheres in leather trade shops and factories in Chicago and across the United States.

\textsuperscript{108} Morfit, \textit{The Arts of Tanning}, 24.
Chapter 4

THE TRADESWOMAN: AGNES NESTOR

John Waterer states in his seminal work on leather craftspersonship, “Leather is a manufactured product.” Waterer’s use of the term ‘manufacture’ situates itself between defining leather as a material that is made by human hands and a material produced by technology on a large-scale. Tanned leather is the product of human hands engineering ways to introduce organic, and sometimes synthetic, material to an organic by-product. The finished goods produced with leather, such as shoes, gloves, and fire buckets, are the product of hand working the organic material into functional objects.

As the leather industry in the United States began to find its place in the rapid industrialization of the late nineteenth century, technology did not replace human hands but, rather, aided them in production. The ‘art’ of tanning became more of a science, “requiring careful control and supervision by trained technicians.” As for the process of making finished leather products, much of the work became piecework. In piecework labor, instead of a tradesperson making a pair of gloves from start to finish, each individual worker repeatedly carried out a specific part of the manufacturing process. Each piece of completed work had a set value, and wages were dependent on how much of a product a tradesperson produced. For example, wages were typically set by the dozen glove in glovemaking. Machines and piecework labor drastically altered gender ratios and the division of labor in factories producing


finished leather products. With such technologies as sewing machines, harness
stitchers, horse-collar power stuffing machines, and motorized leather splitters
allowing for increased production, factory owners saw the need to hire more workers
but at lower wages.\textsuperscript{111} Large-scale leather product factories turned to hiring women
and children alongside men to fill their workstations. Oppression in the workplace
crossed gender lines, but it was women and young girls who often experienced it at its
most severe in such factories.\textsuperscript{112}

Gender ratios do not appear to have been as widely affected in Chicago
tanneries in the second half of the nineteenth century. Though women were working in
the industry, tanneries remained a male-dominated workplace in the city. Of the one
hundred and two women working in tanneries across the United States in 1852, none
were employed by tanneries in the state of Illinois.\textsuperscript{113} Eighteen years later, one woman
was working in a tannery in Cook County, Illinois—the county in which Chicago is
located.\textsuperscript{114} And according to the 1880 United States Census, the total number of

\textsuperscript{111} W. Foglesong, \textit{Horse-Collar Power Stuffing Machinery: Under the Foglesong
Patents} (Dayton, OH: W. Foglesong, 1893), Collection of Printed Books and
Periodicals, Winterthur Museum, Garden & Library. Horse-collar power stuffing
machines stuff collar rye or other straw-like materials into horse-collars. Harness
stitchers are similar to sewing machines but can sew through much thicker material.
Motorized leather splitters cut leather to a desired thickness and can be used to split
the flesh layer of the leather away from the grain layer.

\textsuperscript{112} Agnes Nestor, \textit{Women’s Labor Leader: An Autobiography of Agnes Nestor}
(Rockford, IL: Bellevue Books Publishing Co., 1954), 4-29.

\textsuperscript{113} Morfit, \textit{The Arts of Tanning}, 24.

\textsuperscript{114} United States Department of the Interior, Census Office, \textit{State of Illinois. Table No.
1. – Manufactures, by Counties, 1860}; Manufactures of the United States in 1860;
Complied from the Original Returns of the Eighth Census Under the Direction of the
women employed at tanneries in Chicago alone had expanded to ninety-nine individuals.\textsuperscript{115}

The exact cause of the increase in female tannery workers in 1880 is thus far unknown. Likewise, the cause of the dramatic decrease in the number of women working in the industry by the next census can only be speculated. In 1890, it was reported that no women were working in Chicago tanneries, and this trend remained constant into the twentieth century.\textsuperscript{116} If not a clerical error, the earlier increase in women working in the industry may have been caused by their need to diversify employment choices due to the economic recession that took place in the late 1870s. The corresponding decrease in workforce may have paralleled the rise in advocacy for women’s rights in Chicago in the 1880s and the violent labor dispute that become known as the Haymarket Affair in 1886.

The effect industrialization had on gender ratios in Chicago’s finished leather product industry was quite different from that of the tannery industry. With their 


Table 3  Number of Women Employed in Industries Working with Leather in Cook County, Illinois: 1860\textsuperscript{117}

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Women Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookbinding and Blank-Book Making</td>
<td>3</td>
</tr>
<tr>
<td>Boots and Shoes</td>
<td>3</td>
</tr>
<tr>
<td>Leather</td>
<td>0</td>
</tr>
<tr>
<td>Morocco Leather</td>
<td>0</td>
</tr>
<tr>
<td>Saddlery and Harness</td>
<td>0</td>
</tr>
<tr>
<td>Trunks</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4  Average Number of Women, Above the age of Fifteen, Employed in Industries Working with Leather in Chicago: 1880-1900\textsuperscript{118}

<table>
<thead>
<tr>
<th>Industry</th>
<th>Average Number of Women Employed, Above the age of Fifteen</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1880</td>
</tr>
<tr>
<td>Belting and Hose, Leather</td>
<td>---</td>
</tr>
<tr>
<td>Bookbinding and Blank-Book Making</td>
<td>163</td>
</tr>
<tr>
<td>Boot and Shoe Trade</td>
<td>358</td>
</tr>
<tr>
<td>Gloves and Mittens</td>
<td>109</td>
</tr>
<tr>
<td>Leather Goods</td>
<td>---</td>
</tr>
<tr>
<td>Leather: Tanned, Curried, and Finished</td>
<td>99</td>
</tr>
<tr>
<td>Pocketbooks</td>
<td>28</td>
</tr>
<tr>
<td>Saddlery and Harness</td>
<td>100</td>
</tr>
<tr>
<td>Trunks and Valises</td>
<td>0</td>
</tr>
<tr>
<td>Upholstering</td>
<td>21</td>
</tr>
<tr>
<td>Whips</td>
<td>3</td>
</tr>
</tbody>
</table>


products in demand, leather trades in Chicago experienced a significant growth in the number of tradeswomen that joined the workforce between 1860 and the turn of the twentieth century (Table 3 & Table 4). The average number of women working in the boot and shoe trade tripled from 1880 to 1890. Even more notable, the average number of women working in Chicago’s glove and mitten trade increased by more than five times between 1890 and 1900.

By the turn of the twentieth century, women increasingly outnumbered men in the glove and mitten trade. However, glove factories remained a male-dominated and gender-oppressive environment. In 1900, the eight hundred and eighteen tradeswomen working in Chicago glove factories earned a combined total of $279,630. The six hundred and fifty-eight tradesmen earned $814,672, and most of the upper management positions, such as foreman, were occupied by men. Ironically, the finished leather products that were being produced largely by the hands of women were highly masculine objects—heavy duty gloves for hunting, driving, and working on the railroad. Strong suffragist activism arose among the trade as a result of the unrelenting oppression women faced in the glove and mitten trade in Chicago. Influential tradeswomen in Chicago not only became the voice for women’s suffrage in the city, but they became leaders of the national campaign for the labor rights of all who worked in the United States. Working among the eight hundred and eighteen women employed in Chicago’s glove trade at the turn of the twentieth century, Agnes


Nestor (June 24, 1880 – December 28, 1948) was one such tradeswoman who became the “Woman’s Labor Leader.”

As the most recent examination of Nestor’s autobiography fairly defends in its thesis, *Woman’s Labor Leader* proves erroneous in both its timeline and recounting of certain events in the Labor Movement when consulted with primary sources of the time. However, this fact neither diminishes the portrayal Nestor captures of herself as an influential woman, nor does it falsify her description of the work she endured as both a glovemaker and labor leader. The labor was as she recounted.

Nestor’s first job in the glove trade came at the age of seventeen when she was hired by the Eisendrath Glove Company—for $2.95 a week—to operate a machine that wound yarn onto cones in the company’s knitting department. Joseph N. Eisendrath (December 12, 1859 – September 10, 1921) owned the glove


123 Agnes Nestor, United States Passport, June 13, 1923, box 7, folder 3, Agnes Nestor Papers, Research Center, Chicago History Museum.; Agnes Nestor, U.S. Passport Applications, 1795-1925, Chicago, Cook County, Illinois, March 23, 1918, no. 10358, *Ancestry.com Operations, Inc.* (March 1, 2019).; Agnes Nestor, diary, June 24, 1900 to June 23, 1901, box 1, folder 1, Agnes Nestor Papers, Research Center, Chicago History Museum.; Nestor, *Women’s Labor Leader*, 5-6. Agnes Nestor’s passport, passport application, and dairy indicate that she was born on June 24, 1880. This would have made her sixteen when she moved to Chicago in the Spring of 1897 and seventeen when she became employed by the Eisendrath Glove Co. in August of that same year. In her autobiography, however, she states that she was fourteen when she was hired by the glove company. This thesis uses June 24, 1880 as the day Nestor was born.
Figure 12  Agnes Nestor, early twentieth century. (Chicago History Museum, ICHi-067687; Dooser Rohde, photographer.)
manufacturing company at the time of Nestor’s employment in 1897.\textsuperscript{124} He was the husband of Rose Greenebaum and the younger brother of W.N. Eisendrath.\textsuperscript{125} Joseph had taken over the gloving operation from his older sibling, who had initially established the venture as a branch of W.N. Eisendrath & Co.\textsuperscript{126}

For ten years Nestor worked with leather tanned from horsehides at the Eisendrath Glove Co., first in several positions in the knitting department and later as a ‘glove-closer’ sewing the seams of fingers on gloves in the glove department.\textsuperscript{127} The day-to-day management structure of such a company included a general manager who oversaw the factory’s daily operations, foremen and forewomen who oversaw each department, and tradespeople who “completed a specific portion of the glove-making process.”\textsuperscript{128} Not long before Nestor began working in the trade, the process of making a pair of gloves was often carried out by one tradesperson. Piecework labor of the 1890s had largely taken the ‘trade’ out of glovemaking. Nestor found that her position


\textsuperscript{125} Eisendrath, “The Eisendrath Family,” page 57, University of Chicago Library.

\textsuperscript{126} “Jos. N. Eisendrath Dies,” \textit{Hide and Leather}, September 17, 1921, 41.

\textsuperscript{127} Nestor, \textit{Women’s Labor Leader}, 28, 35, 30.

as a glove-closer and that of women who made finer driving and fancy gauntlets were all who remained of the proper tradesperson.\textsuperscript{129}

In the factory, Nestor and her fellow glovemakers worked in large rooms with long tables that had their machines mounted to the tops.\textsuperscript{130} She described of the full piecework process of making gloves,

All the work in the sewing department is piece work so the wages depend upon the speed of the operator. The gloves are made by the dozen and each class of operators has a particular part of them to make. After they are cut they go to the silker, who does the fancy stitching on the backs; then to the closer, who sews in the thumbs and joins the pieces to the palms to form the backs; they then go to several operators each of whom does a small part of the banding; then the gloves come back to the closer to be closed around the fingers. This finishes most of the bandtop gloves [gloves with short cuffs] but the gauntlets [gloves with long cuffs] have to go to the binder or hemmer who finishes the tops. Nearly all of the gloves are finished on the wrong side [inside out] and have to go to another department to be turned and layed off on a heated iron form; this is the finishing process. This is the making of the heavy working and driving gloves.\textsuperscript{131}

Piecework was “worry as well as work,” according to Agnes.\textsuperscript{132} Women and men working in the glove industry were paid for the work they completed, but, with low pay and long hours, a lot of work amounted to little reward. Any loss of time for


\textsuperscript{130} Nestor, \textit{Women’s Labor Leader}, 28.

\textsuperscript{131} Nestor, “A Day’s Work Making Gloves,” \textit{Charities and the Commons} 20, September 5, 1908, 659.

\textsuperscript{132} Nestor, “A Day’s Work Making Gloves,” \textit{Charities and the Commons} 20, September 5, 1908, 661.
Table 5  Estimated Weekly Wage Range of Women Working in Chicago’s Glove Industry, 1906133

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Wage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fingerers</td>
<td>$8 to $9 per week</td>
</tr>
<tr>
<td>Thumbers</td>
<td>$9 to $10 per week</td>
</tr>
<tr>
<td>Backers</td>
<td>$9 to $10 per week</td>
</tr>
<tr>
<td>Silkers</td>
<td>$8 to $9 per week</td>
</tr>
<tr>
<td>Banders</td>
<td>$8 to $10 per week</td>
</tr>
<tr>
<td>Closers</td>
<td>$9 to $16 per week</td>
</tr>
<tr>
<td>Binders</td>
<td>$8 to $9 per week</td>
</tr>
<tr>
<td>Fasteners</td>
<td>$4 to $8 per week</td>
</tr>
</tbody>
</table>

Figure 13  How a room organized for piecework may have appeared in the Eisendrath Glove Co. This photo was taken in a Chicago factory making leather suitcases, c.1900. (Chicago History Museum, ICHi-040228.)

lunch, changing thread, or a broken machine resulted in a reduction in pay, and too often the price of making a living came at the cost of one’s health.\textsuperscript{134}

Long work days were central to the poor working conditions women and men faced at the Eisendrath Glove Co. before the factory became unionized through Nestor’s leadership. For no less than forty-nine hours a week—and with few breaks—Agnes worked tirelessly with her hands to complete the most difficult part of the glovemaking process.\textsuperscript{135} As a glove-closer, she was tasked with closing several dozen pairs of gloves in a week by sewing together the seams around the fingers.\textsuperscript{136} The horsehide work gloves she was working with were made of thick, dense leather that required a great amount of strength to maneuver the bends and curves of glove’s fingers through a turn-of-century clutch sewing machine.\textsuperscript{137} Other conditions at the Eisendrath Glove Co. proved unjust as well. Workers were charged fifty cents a week for the electrical power supplied to their machines. This was considered their ‘machine rent.’ They were also required to purchase their own sewing needles and machine oil for maintaining their equipment. Workers had to purchase the machine oil from a specific place that was out-of-the-way, according to Nestor.\textsuperscript{138} Arguably the most

\textsuperscript{134} Nestor, “A Day’s Work Making Gloves,” \textit{Charities and the Commons} 20, September 5, 1908, 659-661.

\textsuperscript{135} Nestor, \textit{Women’s Labor Leader}, 6.


\textsuperscript{137} Nestor, “A Day’s Work Making Gloves,” \textit{Charities and the Commons} 20, September 5, 1908, 659-660.

\textsuperscript{138} Nestor, \textit{Women’s Labor Leader}, 29.
unjust circumstance occurred when a tradeswoman’s weekly pay was decreased by $7 due to her machine being inoperable.\textsuperscript{139}

Foremen in some departments of the factory also enacted certain oppressive restrictions. Nestor states, “Every time a new foreman came in, he demonstrated his authority by inaugurating a new set of petty rules which seemed designed merely to irritate us.”\textsuperscript{140} Agnes experienced such conditions as having her flat weekly pay of $3 lowered to $2.95 as a result of the foreman believing it made more sense that the pay rate be five cents an hour for a forty-nine hour work week.\textsuperscript{141} One such rule was put in place that restricted the tradeswomen from leaving their sewing room to eat lunch with someone in another room.\textsuperscript{142}

The Eisendrath Glove Co. combated the growing threat of their glovemakers assembling together to organize a labor union by isolating departments using the interior construction of the building. Chicago and its industries had increasingly become a heavily unionized city by the turn of the twentieth century.\textsuperscript{143} However, in 1902, the Eisendrath Glove Co. remained a holdout factory in this regard. If preventing unionization through isolation was the company’s larger goal, it failed. Two events in May of 1902 pushed Eisendrath’s glovemakers to carry out the factory’s first labor strikes. The first occurrence was the ‘banders’ having their

\textsuperscript{139} Nestor, \textit{Women’s Labor Leader}, 9.
\textsuperscript{140} Nestor, \textit{Women’s Labor Leader}, 29.
\textsuperscript{141} Nestor, \textit{Women’s Labor Leader}, 6.
\textsuperscript{142} Nestor, \textit{Women’s Labor Leader}, 29.
\textsuperscript{143} Grivois-Shah, “Agnes Nestor,” 36-37, 9.
piecework even further subdivided—causing the tradeswomen to walk out of the factory. Occurring a short time later, the second event was the firing of a glove-cutter which caused his department, who were all men, and Nestor’s fellow glove-closers to strike.\textsuperscript{144} Agnes recounts of the moment,

\begin{quote}
We walked out. We did not use the near-by stairs but walked through the next room in order that the girls there might see us leaving…I knew that our cause was lost unless we got those girls to join us. When we got out to the street, I told my companions that all was lost unless we could get those others to walk out too. We lined up across the street shouting “Come on out!” and calling out the names of some of the girls…Gradually others followed until the shop was almost emptied. Then we paraded to the hall on Leavitt Street for the meeting with the union leaders.\textsuperscript{145}
\end{quote}

The place from which the workers were shouting was likely near the intersection of Elston and Armitage avenues, a busy commercial intersection in the early twentieth century. To the strikers’ benefit and the company’s detriment, the location of the factory made the strike a public affair from the beginning. Additionally, the union leaders they paraded down public streets to meet were those of the Chicago Federation of Labor. These leaders backed the strike and structured the glovemakers’ demands of the Eisendrath Glove Co.\textsuperscript{146} Nestor and the other strikers no longer wanted to pay the company for the power supplied to their machines, they wanted to stop paying for

\textsuperscript{144} Nestor, \textit{Women’s Labor Leader}, 30-32. In her autobiography, Nestor states that the two strikes occurred in 1898. This claim goes against newspaper articles that covered the second strike and a telegram from the Eisendrath Glove Co. that exists in her papers at the Chicago History Museum. This thesis uses 1902 as the year of the strikes.

\textsuperscript{145} Nestor, \textit{Women’s Labor Leader}, 32-33.

\textsuperscript{146} Nestor, \textit{Women’s Labor Leader}, 33.
needles, they demanded free machine oil, they wanted a fully unionized shop, and they wanted the glove-cutters to receive a raise in wages.147

A telegram dated May 24, 1902 reads, “All differences between ourselves and employees having been settled by a compromise, work will be resumed Monday morning, May 26th. Yours truly, Eisendrath Glove Co.”148 After ten days and one of the company’s proposals being denied by the strikers, the strike ended and the glovemakers returned to work with their demands having been satisfied.149 Nestor had been chosen by the Chicago Federation of Labor, in the lead up to the victorious compromise, to serve on the committee that represented the strikers before the Eisendrath Glove Co. With the success of the both the strike and the negotiations, her appointment to the committee altered the trajectory of her life.150

Nestor continued working as a glove-closer at the Eisendrath Glove Co. in 1910s, but throughout the decade she became progressively more involved in unions and the Labor Movement. She first gained national recognition as a labor leader

147 “Ducked by Girl Strikers: One who Wanted to go to Work Given Water Cure,” Chicago Daily Tribune, May 24, 1902, ProQuest Historical Newspapers.

148 Eisendrath Glove Co., telegram, May 24, 1902, box 1, folder 1, Agnes Nestor Papers, Research Center, Chicago History Museum.


shortly after the strike when she aided in organizing the International Union of Glove Workers of America.\textsuperscript{151} She was president of the Women’s Trade Union League of Chicago by 1913, and throughout her life she served in several leadership positions in the organization’s national branch.\textsuperscript{152} Furthermore, in 1914, she was appointed to a committee by President Woodrow Wilson that was tasked with studying the subject of national aid for vocational education.\textsuperscript{153}

The pinnacle of Nestor’s work may have very well been as a central influencer on the passage of both the ten-hour work day bill and the subsequent eight-hour work day bill in the state of Illinois. However, her very personal task of negotiating the first new union agreement since the strike between the Eisendraeth Glove Co. and her local chapter of the International Union of Glove Workers of America must not go unrecognized.\textsuperscript{154} Now backed by an international governing body in 1904, she possessed a considerable amount of workplace authority when advocating for the labor rights of herself, her friends, and her neighbors—who just several years prior were banned from eating lunch in the same workroom. Her tireless advocacy in the negotiation is evident in her own personal draft of the contract. Comprised of an assortment of formal and informal documents, her draft is ornamented with

\textsuperscript{151} Nestor, \textit{Women’s Labor Leader}, 44-45.

\textsuperscript{152} Nestor, \textit{Women’s Labor Leader}, 296, 255.; Program of the Thirty-Fifth Anniversary of the National Women’s Trade Union League, February 4, 1939, box 4, folder 1, Agnes Nestor Papers, Research Center, Chicago History Museum.

\textsuperscript{153} Woodrow Wilson to Agnes Nestor, February 17, 1914, box 1, folder 7, Agnes Nestor Papers, Research Center, Chicago History Museum.

\textsuperscript{154} Nestor, \textit{Women’s Labor Leader}, 56-57.
marginalia, crossed out text, underlined phrases, the words ‘accepted’ and ‘rejected,’ amendments, numerical changes, folds, tears, staple holes, and a possible stain from a cup of tea. \textsuperscript{155}

This negotiation between the two parties, and those that followed, appeared to forge a business friendship between Agnes and the company’s owner, Joseph N. Eisendrath. She refers to him and Henry Greenebaum—Eisendrath’s brother-in-law who became general manager of the factory shortly after it was unionized—as “friends.” \textsuperscript{156} Nestor recounted of Eisendrath, he “had been a man easily excited but wonderful to deal with,” and his attitude toward wage agreements and labor relations was one “more employers should consider.” She continued, “Mr. Eisendrath was always remembering that he and we were all human, not merely employer and employees.” \textsuperscript{157} Eisendrath was, however, a businessman by trade, and by coming to an agreement with the strikers in 1902 he gained something materially that was arguably as valuable as his good standing among his employees. By unionizing his factory he was given permission to brand everything manufactured under the Eisendrath Glove Co. name as ‘Union Made.’ \textsuperscript{158} This proved to be a valuable label in a nation where labor concerns filled the newspapers, and ‘Union Made’ objects were

\begin{flushleft}
\textsuperscript{155} Contract between the Eisendrath Glove Company and the International Glove Workers of America, Local No. 4 and 18, 1904, box 1, folder 1, Agnes Nestor Papers, Research Center, Chicago History Museum.

\textsuperscript{156} Nestor, \textit{Women’s Labor Leader}, 234.

\textsuperscript{157} Nestor, \textit{Women’s Labor Leader}, 234.

\end{flushleft}
held in high regard. Eisendrath spared little time altering his advertisement strategy after being granted the branding rights (Figures 14-16).159

From a material and construction perspective, the horsehide work gloves Nestor made under the Eisendrath brand probably did not need the union label in order to be marketable to consumers. Imagery and printed text in advertisements of the time reveal the high-quality composition of the gloves she and her fellow glovemakers were producing.160 In fact, this can be seen of Chicago glove companies from an early date in the industry’s history.161 Yet, the significance of the glove industry’s material culture to Chicago has not been given the credit it deserves, in comparison to the boot and shoe trade. Shoes have long been a necessity in Western society, while gloves have been merely an accessory. However, a reliable pair of gloves was the difference between one’s life being safe or in danger when working on the railroad in the nineteenth and twentieth centuries.


160 Eisendrath Glove Co., Asbestol Gloves straight cuff, in the author’s possession.; Eisendrath Glove Co., Asbestol Gloves gauntlet, in the author’s possession.

Figure 14  1903 Asbestol Gloves advertisement, Eisendrath Glove Co. (Brotherhood of Locomotive Firemen's Magazine, 1903. Author’s Collection.)
According to the ‘Notice’ in Figure 14, Eisendrath was supplying Nestor and the other horsehide glovemakers with leather of mineral tannage. It is beyond a reasonable doubt that Eisendrath’s leather was being tanned through a chrome tanning process—a mineral tannage—though no known example is believed to exist from Nestor’s time period (Chapter Five covers chrome tanning). Using his brother’s tannery as a probable source for his leather, Joseph N. Eisendrath was “said to have been among the very first to develop chrome tanning for glove leathers and to use chrome horse leathers in gloves.”

Chrome tanning was a relatively new process in the early twentieth century, having been developed for commercial production in the 1890s. This mineral tanning process produced the most reliable and durable leather at the time. As the glove advertisement states, these gloves were “guaranteed to remain soft and pliable and to stand a great amount of heat, steam, hot water and washing. And will give excellent satisfaction in wearing, especially for railroad work and for mining, farming, driving and all purposes requiring superior wearing qualities.”

The glove’s ability to resist heat had probably less to do with the leather and more to do with the glove-lining, which is presumably how this brand of glove got its name. The lining in the Eisendrath Glove Co.’s trademarked ‘Asbestol’ gloves was likely manufactured from the hazardous material chrysotile asbestos. The material would

162 Eisendrath Glove Co., Asbestol Gloves Notice, in the author’s possession.

163 “Jos. N. Eisendrath Dies,” *Hide and Leather*, September 17, 1921, 41.

164 Eisendrath Glove Co., Asbestol Gloves Notice, in the author’s possession.
Figure 15 1903 Asbestol Gloves advertisement, Eisendrath Glove Co. (Brotherhood of Locomotive Firemen's Magazine, 1903. Author’s Collection.)
have provided a strong tear and heat resistant backing to the leather, and it was not known to be dangerous at the time.165

A well-fitting glove depends greatly on both the characteristics of the leather and the skill at which the pieces of the glove are cut out by hand or with a mechanical clicker press that pushes sharp, metal cookie-cutter-like dies into leather. High quality horsehide leather has little ‘run’ or stretch, which therefore would have jeopardized the quality of fit of Eisendrath gloves. A glove made of such leather will physically move with every motion of the hand, rather than properly stretching with each movement.166 The wearer loses both dexterity and comfort if a glove moves rather than stretches—the former being an undesirable feature. Asbestol gloves became “famous wherever Leather work gloves are used,” suggesting that Eisendrath and his workers found successful ways to combat this natural characteristic of horsehide leather.167 The first way Eisendrath did so was by chrome tanning the hides which produced a more pliable leather.168 Second, it was likely that the glove-cutters were trained in the skill of maximizing the leather’s stretch in all directions without damaging or wasting any of the leather, and then cutting the pieces to shape.169 This is


166 Waterer, Leather in Life, 198.


168 Eisendrath Glove Co., Asbestol Gloves Notice, in the author’s possession.

169 Waterer, Leather in Life, 198.
Figure 16  1903 Asbestol Gloves advertisement, Eisendrath Glove Co. (*Brotherhood of Locomotive Firemen's Magazine*, 1903. Author’s Collection.)
quite possibly a reason why the glove-cutters strike in 1902 was so critical to the glove company, even though their work was considered piecework labor. The third way the issue of glove-fit was addressed by the Eisendrath Glove Co. was by ‘double-walling’ or adding a second layer of leather to the palm of their gloves (Figure 15 & Figure 16). The narrow second layer of leather was sewed tightly into the webbing of the glove between the thumb and the index finger, across the palm, and then to the cuff.\textsuperscript{170} This acted as a compression band, contouring the leather to the most mobile portion of the hand and holding the glove tightly in place during movement. Additionally, the palm of the hand typically experiences the most impact during work, so the double-walled palm increased the durability of the glove.

Enhanced durability through reinforcing materials, such as the double-walled palm, was a common feature on gloves manufactured by the Eisendrath Glove Co. The heaviest-duty Asbestol gloves the company produced were their gauntlets, style no.912 (Figure 16). This style was marketed as a “favorite with enginemen” working on the railroad, and boasted its durability by stating, “you are equipped for a long hard run if you wear Asbestol.”\textsuperscript{171} The gauntlet in the advertisement not only features a double-walled palm, but also a double-stitched seam at the weakest point of the long cuff. Two dotted lines can be seen near the wrist seam that connects the glove to the cuff—indicating the double-stitching.\textsuperscript{172} When an engineman or a worker in another occupation put these gloves on, they were likely to have pulled on the edge of the cuff

\textsuperscript{170} Eisendrath Glove Co., Asbestol Gloves straight cuff, in the author’s possession.

\textsuperscript{171} Eisendrath Glove Co., Asbestol Gloves gauntlet, in the author’s possession.

\textsuperscript{172} Eisendrath Glove Co., Asbestol Gloves gauntlet, in the author’s possession.
closest to their forearm in order to slide their hand past the wrist seam and snuggly into the proper fingertips. Pulling or tugging on that forearm edge of the cuff would have caused tension in the wrist seam. That seam would have become destabilized much sooner than it presumably did if it were not for the double-stitching. Asbestol gauntlets were designed for work and wear. The long cuffs protected forearms from heat and damage, allowing the wearer to utilize that part of their body in more of their laborious work. Specifically, the gauntlets were advertised for a male-dominated occupation in the early twentieth century. A perplexing reality considering the thousands of gloves Agnes Nestor closed during her ten years at the Eisendrath Glove Co., and the fact that most of the hands that went into making the gloves were that of women.

By 1912, the Eisendrath Glove Co. was reported to be the largest manufacturer of gloves in the United States. After first operating in the W.N. Eisendrath & Co. tanning complex on the bank of the river at the end of Sangamon Street, Joseph expanded the company to a factory at Randolph and Green streets in the Fulton-Randolph Market District in 1889. As his business continued to grow following the World’s Fair, he moved his operations back to the heart of the Tannery District in a factory that still stands near the river at the intersection of Elston and Armitage avenues—just north of Goose Island. It was in this factory that Nestor made gloves


174 “Jos. N. Eisendrath Dies,” *Hide and Leather*, September 17, 1921, 41. The factory (2001 N. Elston Avenue) now houses a self-storage company by the name of Self Storage 1.
and participated in her first labor strike. It was also in this space that she made a humorous observation about the men working in the nearby tanneries, “We had only a half-hour at noon. It was a sight then to see the men from the tanneries opposite running across the way to the saloon and back with long sticks from which beer pails were suspended.”¹⁷⁵ Men from one tannery she probably referred to was that of the Herman Loescher Company who tanned leather in a factory to the north of the glove company, across the alley. This large brick-clad factory maintains a long tradition in Chicago’s leather industry. Presently, it is home to the last operating tannery in the city, the Horween Leather Company.

¹⁷⁵ Nestor, Women’s Labor Leader, 6.
Chapter 5

THE FAMILY: HORWEEN LEATHER COMPANY

The two most prominent families of Chicago’s leather industry were united through matrimony on Thanksgiving Day in 1928. Marion Eisendrath, Chicago socialite and daughter of W.N. Eisendrath, married Arnold Horween Sr., head football coach at Harvard and son of Isidore Horween, in a ceremony that was covered by newspapers from Chicago to New York.176 By the day of his daughter’s wedding, W.N.’s legacy in the industry survived through the work of the third generation of Eisendrath tanners in America. He had passed away two years prior to the ceremony, but his sons, William Eisendrath Jr. and Edwin Eisendrath, remained firmly in the family trade with the Monarch Leather Co.177 On the other side of the aisle, Isidore’s legacy was in its relatively early stages, but I. Horween & Co.’s reputation had grown to prominent international status by 1928.

Isidore Horween (September 18, 1869 – December 4, 1949) was likely born in Mohyliv-Podilskyi (Mogilev), Ukraine, at a time when his native country was governed by the Russian Empire.178 Arnold Horween Sr.’s passport application


reveals that his father—at around the age of twenty-three—immigrated to the United States via the port of Hamburg, Germany in about August of 1892.\textsuperscript{179} Horween does not seem to appear on any passenger lists of ships that departed from Hamburg around this time, however, this could be due in part to him changing his surname to Horween from Horwitz or another name phonetically similar to it on his journey—as oral tradition suggests.\textsuperscript{180} Isidore used ‘Horween’ as his last name on his first legal document in the United States, his marriage to Rose Rabinoff in Chicago on October 8, 1895.\textsuperscript{181} Three years later, on July 12, 1898, he took the first step in trademarking the name that would become synonymous with Chicago leather when he again signed the same last name on the document that made him a naturalized citizen of the United States.\textsuperscript{182} 

To the benefit of Arnold and Marion’s descendants, the Horween Leather Company, and Chicago’s leather industry as whole, the Horween and Eisendrath families were destined to meet. It was likely W.N.’s exhibit in the Shoe and Leather Building that Horween confidently approached when he was searching for employment in Chicago’s leather industry at the 1893 World’s Columbian

\footnotesize
\begin{itemize}
  \item \textsuperscript{179} Arnold Horween, U.S. Passport Applications, 1795-1925, Chicago, Cook County, Illinois, April 21, 1924, no. 2850, Ancestry.com Operations, Inc. (March 2, 2019).
  \item \textsuperscript{181} Isidor Horween and Rose Rabinow [sic], Cook County, Illinois, Marriages Index, 1871-1920, October 8, 1895, Ancestry.com Operations, Inc. (March 3, 2019).
  \item \textsuperscript{182} Isidore Horween, Final Certificate of Naturalization, July 12, 1898, Horween Leather Company Archives, Horween Leather Company, Chicago, Illinois.
\end{itemize}
Exposition. Additionally, it was almost certainly W.N. Eisendrath & Co. that hired Horween in the week following his attendance of the fair, and in which tannery he rose to the position of foreman by 1900. Horween earned the title of master tanner 

183 Horween, discussion.

several years thereafter, however, this was achieved by his own accord. With the tanning skills he had mastered in Ukraine and the experience he had gained in Chicago’s leather industry, Isidore established his own tannery, I. Horween & Co., in 1905.185

Horween needed to look no further than Goose Island for a suitable factory to house his tannery. The island was still the heart of Chicago’s Tannery District in 1905, and the first location of I. Horween & Co. was in a building that remains standing on the southeast corner at the intersection of Division and North Branch streets.186 The L-shaped red brick factory once occupied forty-two thousand and seven hundred square-feet, stood three stories atop a heavy timber frame with a basement, and boasted an industrial spur on the railroad that allowed the tannery to move finished leather both domestically and internationally.187

Vegetable tanned shell cordovan was the first leather Horween produced in his Goose Island factory. This leather was tanned by soaking the hide that covered the buttocks of a horse in a plant-based tanning liquor. The high-density of the leather proved ideal for not only footwear, but for razor strops. It was for this latter product that Horween specially tanned shell cordovan in the early years of the tannery’s


186 Horween Leather Company, business card, 1920-1927, Horween Leather Company Archives, Horween Leather Company, Chicago, Illinois. The factory (1071 W. Division Street) is now a showroom for a foodservice design and equipment company by the name of Boelter.

Barbers and other individuals who shaved with straight razors used strops to sharpen and finish the blade of their tool before the invention of the safety razor. The general design of the razor strops that were made over a century ago with Horween’s shell cordovan are very similar to those being produced today. They appear as narrow strips of leather and are typically two and half to three inches wide by one to two feet long. The density of the shell cordovan does not sharpen or refine the blade by removing metal, but rather, as one glides the razor down the grain of the leather it aligns the micro ridges of the blade that have become bent through repeated use.

The fine quality of Horween’s shell cordovan became internationally renowned for crafting razor strops by 1913. The success and quality of the product was, in large part, a result of three key factors. First, Horween remained rooted in the traditional practice of vegetable tanning at a time when tanneries in Chicago began to rely heavily on the recently developed method of commercial chrome tanning. Unlike vegetable tanned leather, the grain layer of chrome tanned leather does not retain the consistency of naturally occurring ‘grit’ that is integral to re-aligning the

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188 Horween, discussion.


190 “A Microscopic Inspection of Mr. Jack Razor: Being a Readable bit of Counter Literature put out by the American Hone Co.,” *The American Cutler*, February 1918, 10, https://babel.hathitrust.org/cgi/pt?id=uiug.30112045394779;view=2up;seq=116;size=175.

191 Horween, discussion.

192 “Jos. N. Eisendrath Dies,” *Hide and Leather*, September 17, 1921, 41.
micro ridges of a razor blade. Additionally, the techniques Horween likely used to perfect his shell cordovan were a mix of traditional vegetable tanning methods that he had brought with him from Ukraine and those he learned while working as a tannery-foreman in Chicago. Very few tanneries were producing vegetable tanned shell cordovan quite like I. Horween & Co. in the early twentieth century.\(^\text{193}\)

Second, Horween was importing high quality horsehides that produced very fine leather. Just as the tannery does today, all of the horsehides Isidore imported were by-products of the food industry and sourced from regions of the world that consumed horsemeat—such as certain parts of Canada.\(^\text{194}\) Isidore’s ability to source raw materials from slaughterhouses in select areas that had experience in flaying horsehides greatly reduced his chance of importing hides with significant defects.\(^\text{195}\)

Lastly, Horween was a true master tanner in a trade that was starting to put science and chemists in laboratories above practical tanning and tanners tending to vats. Horween’s original tanning recipes—which have largely gone unchanged for over a century—were developed from his innate practical knowledge of tanning and his material literacy of hides, tannins, and Chicago’s water content. Isidore’s success, and the longevity of the company, relied on him being a practical tanner in a trade that was no longer treated as practical.

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193 Horween, discussion.

194 Horween, discussion.

Figure 18  Isidore Horween (seated center) with some of his workers in the beam-house at I. Horween & Co. (Courtesy of Nick Horween, Horween Leather Company.)
Being practical did mean changing when change needed to be made, and Horween did just that when he developed his first chrome based tanning recipe around 1913.\textsuperscript{196} There seems to have been little pressure within the leather industry for I. Horween & Co. to diversify its tanning operation, however, externally there were critical changes occurring in the razor industry that were impacting the shell cordovan market. The almost immediate popularity of King Gillette’s newly invented safety razor gradually made both straight razors and razor strops obsolete after the shaving device entered the market in 1903. With millions of new blades sold in the early 1910s, Horween’s solution to his problem was to begin chrome tanning leather for footwear.\textsuperscript{197} The product he developed was a combination tanned horsehide leather—leather tanned in at least two different ways—trademarked Chromexcel.\textsuperscript{198}

Horween did not cease the production of shell cordovan after he ventured into chrome tanning. Instead, he altered his recipe and began tanning softer shell cordovan that was more suitable for the boot and shoe trade. Chromexcel did, however, become a major operation within the tannery and remains a staple of the company with shell cordovan.\textsuperscript{199} The combination tanning of Chromexcel employs both chrome tanning and vegetable tanning. The chrome base tannage makes the leather supple and more

\textsuperscript{196} Horween, discussion.

\textsuperscript{197} J. P. Sprang, Jr., \textit{Look Sharp! Feel Sharp! Be Sharp!: Gillette Safety Razor Company Fifty Years, 1901-1951} (New York: The Newcomen Society in North America, 1951), 15.


\textsuperscript{199} Horween, discussion.
durable than vegetable tanned leather. Then, by retanning the material in a bark-based liquor the leather takes on the plumpness of being vegetable tanned and renders it malleable when exposed to heat and moisture. For shoemakers and the feet of consumers, these characteristics proved ideal for the upper leather of boots and shoes. Shoemakers could comfortably form the leather around lasts, and early twentieth century Chromexcel consumers were wearing footwear that was water resistance, flexible, durable, and maintained an aesthetic patina with age.

Experiments on the reaction of chromium salts (chromium[III] sulfate) upon animal hides and skins occurred in the United States as early as 1858. According to a study by Bruno P. Pouliot, Dr. Jennifer Mass, and Lara Kaplan,

Commercial production of chrome-tanned leather began in Philadelphia in the 1890s using ore extracted from a large chromite deposit near Baltimore. Within a decade, up to 80% of light-colored leathers manufactured in the U.S. were chrome tanned, often imitating the soft kid leathers traditionally alum tawed.

The widespread practice of chrome tanning led to a vast number of tanning combinations and process modifications by the time Horween began tanning


202 Rogers, Practical Tanning, 158.

Chromexcel in 1913. Isidore’s specific combination tanning method for Chromexcel put the leather through approximately eighty-nine processes and took around one month to tan—as compared to the half-year it took to vegetable tan shell cordovan. Horween likely continued using horsehides to tan Chromexcel leather throughout much of the 1910s, and, in particular, he was probably using this method to tan the front quarter of horsehides—also known as the horsefront. It was not until the 1920s that the company formally began producing Chromexcel with cattlehides.

The Chromexcel tanning process that Isidore invented over one hundred and six years ago has largely remained the same as the recipe has been passed down from generation to generation in the family. A few things have changed: the family no longer uses whale oil as an ingredient, the recipe is adjusted to the city’s water as its content changes, and now all the water that has gone through the tanning process is treated in their in-house EPA compliant water treatment facility. Some of their machinery has also changed, but much has remained the same.

Just as Isidore did, the process begins with hides that enter the tannery having been brined (salted) at the slaughterhouse and with all the hair still attached. After the full-sized hides have been cut length wise down the middle to create two sides or half hides, they are then washed in vats of water to clean the hides of salt and dirt. Next,

\[\text{\footnotesize\textsuperscript{204}}\text{Rogers, } \textit{Practical Tanning}, 194.\]
\[\text{\footnotesize\textsuperscript{205}}\text{Horween, “Chromexcel®,” } \textit{Horween Leather Company} \text{ (blog), March 23, 2010.; Horween, discussion.}\]
\[\text{\footnotesize\textsuperscript{206}}\text{Horween, discussion.}\]
\[\text{\footnotesize\textsuperscript{207}}\text{Horween, discussion.; Horween, “Chromexcel®,” } \textit{Horween Leather Company} \text{ (blog), March 23, 2010.}\]
the hides are dehaired.\textsuperscript{208} At the tannery today, this is accomplished in a rotating cylindrical drum filled with a lime and sodium sulfide liquor that ‘burns’ the hair and breaks down the keratin which dissolves the epidermis layer of the skin.\textsuperscript{209} In the 1910s, dehairing would have likely been carried out by first ‘liming’ in stationary vats, and then using a blunt blade on an unhairing machine or a tanner’s unhairing knife to remove the loosened hair (Figure 18). Throughout much of tanning history, the hair by-product that was stripped from hides by way of a knife or blade was sold to such business as plasterers, hair felters, and upholsters for filling cushions.\textsuperscript{210}

The hides at the tannery in the present day are put through a second water-based liming process and then thoroughly washed.\textsuperscript{211} After liming, the material is fleshed by scraping away the loose flesh on the meat side of the animal by-product. Isidore may have completed this step using a sharp blade on a fleshing machine or fleshing knife, and historically, the flesh that was scraped away was often used in glue.


\textsuperscript{209} Horween, “Chromexcel®,” \textit{Horween Leather Company} (blog), March 23, 2010.; Matthew Cushman, “ARTC 670: Connective Tissue & Leather Chemistry” (lecture, University of Delaware Program in Art Conservation, Winterthur Museum, Garden & Library, Winterthur, DE, November 1, 2018); Melissa Tedone, “Notes from the Leather Symposium, AIC Annual Meeting, Houston, TX, May 29, 2018” (unpublished manuscript, August 2018), Winterthur Museum, Garden & Library.

\textsuperscript{210} Lackawanna, \textit{The Lackawanna Leather Co.}, 14.

\textsuperscript{211} Horween, “Chromexcel®,” \textit{Horween Leather Company} (blog), March 23, 2010.
manufacturing. Fleshing opens and relaxes the hide in order to make the material more permeable in the bating, pickling, and tanning steps of the Chromexcel process.²¹²

Bating occurs by soaking and mechanically paddling—similar appearance to a steamboat paddle wheel or a waterwheel at an old grist mill—freshly washed hides in certain chemicals and pancreatic enzymes. This action releases the previous lime substance and opens the collagen network of the skin so that the forthcoming tannage will properly penetrate the hide. After washing the hides for at least the fourth time, they are ‘pickled’ and paddled in water-based sulfuric acid which, like bating, preserves and prepares the hide for the tanning process.²¹³ Next, the hides are tanned for the first time in the Chromexcel process.²¹⁴ Inside of a rotating drum the hides are chrome tanned in water, chromium salts, bicarbonate, and certain concentrations of other tanning agents used by the tannery. The length of the chrome tanning process largely depends on the changing pH balances of the hides within the drum—which are closely monitored. In fact, the changing of pH may be the most important chemical reaction in tanning. The resulting leather produced by chrome tanning is what is known as ‘wet blue,’ due to the material’s robin egg blue shade.²¹⁵


²¹⁵ Cushman, “ARTC 670” (lecture, November 1, 2018).
Figure 19  A Motor-driven chrome tanning drum at the J. Greenebaum Tanning Co. in Chicago, 1912. This photograph was taken in the previous factory to the one the company moved to in Figure 3 and Figure 4. (*Electrical Review and Western Electrician*, November 23, 1912.)

The wet blue leather is then removed from the drums and is sorted according to quality based on “grain character, weight/thickness, scratches, scars, brands, etc.” 216 For the leather to receive its second tannage, the material is, yet again, placed inside of a drum and retanned in Horween’s proprietary blend of bark extracts and natural tanning agents. 217 Unlike the chemical reaction created by tanning agents in chrome tanning that closes the molecular structure of the leather, tanning agents in vegetable


tanning fill in open space which gives the leather its plump and full-bodied feeling.\textsuperscript{218} By comparison, vegetable tanned leather retains around thirty percent of its tanning agents while chrome tanned leather only retains four percent. The low percentage of retained tanning agents in chrome tanned leather is what makes the material so durable and resistant to degradation, unlike its counterpart.\textsuperscript{219}

With combination tanned leather in hand, the tannery’s next action is to give the material its traditional ‘pull-up’ characteristic that Chromexcel has become so well-known for. This is done through ‘hot stuffing.’ Nick Horween, Vice President of Horween Leather Company, states of this process,

\begin{quote}
The next step is ‘hot stuffing’ - that is, the impregnation of the hides with oils, waxes, and greases that are solid at room temperature. Stuffing is achieved through the use of steamed mills, and is the process that is responsible for the ‘pull-up’ of this leather. Pull-up is the temporary displacement of these oil and wax blends that cause a lightening of the leather.\textsuperscript{220}
\end{quote}

The two final steps after hot stuffing have been tied to the Chromexcel tanning process from the time Isidore developed his earliest recipes.\textsuperscript{221} The finishing process begins by hand-rubbing every side of Chromexcel with an aniline finish. This finish is a non-pigmented dye that protects the leather while preserving the grain’s natural pattern and

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\textsuperscript{218} Cushman, “ARTC 670” (lecture, November 1, 2018).
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\textsuperscript{221} Horween, discussion.
\end{flushright}
appearance. Finally, the age-old ingredient of neatsfoot oil is applied over the leather as a traditional conditioner.²²²

The Chromexcel tanning recipe, with all of its written and unwritten trade knowledge, has been held by five generations of Horween tanners. The permanence of the recipe is notable considering Isidore developed and tanned Chromexcel at a complex time in the leather industry. Horween’s success depended on remaining rooted in tradition with his vegetable tanned shell cordovan, but he also needed to be willing to adapt with the advancing tanning technology of the 1890s and early twentieth century. For instance, in 1918, he was tanning Chromexcel at maximum output based on what his factory could handle. That same year, Isidore received a letter from A.F. Gordon—his leather distributor in Boston who had also once owned shares in the W.N. Eisendrath & Co.—informing him that General John J. Pershing wanted to make a pair of riding boots out of his shell cordovan. Pershing, who was in France commanding troops in World War I, made the request after failing to acquire a pair in London and France, only to learn that the shell cordovan of the boots had been tanned in the United States at I. Horween & Co.²²³

The success of shell cordovan and Chromexcel allowed Isidore to expand his company to a new factory just north of Goose Island in 1920. Located next to the Eisendrath Glove Factory at the intersection of Elston and Ashland avenues, Horween


purchased the building from the tannery whose workers Agnes Nestor may have observed running to the saloon for beer at lunch.\textsuperscript{224} The Horween Leather Company still operates out of this factory today—ninety-nine years later.

Horween not only purchased the factory of the Herman Loesch Company in 1920, but he also bought their whole tanning business. As a result of this purchase, and in anticipation if his two sons joining the business, Isidore incorporated I. Horween & Co. and the Herman Loescher Company into the Horween Leather Company.\textsuperscript{225} Isidore remained working as the master tanner of the company until 1948—a year before his death. By this time Harry Horween, former vice president of the tannery and presumably Isidore’s brother, had passed away, and both of Isidore’s sons, Arnold Sr. and Ralph, had entered the family trade.\textsuperscript{226} Arnold Sr. worked as the president of the company from 1949 to 1983, and then he passed the business down to his son Arnold Jr. who carried out tanning from 1983 until 2003. Today, the tanning operation is headed by Arnold “Skip” Horween III and his son Nick Horween, fourth


and fifth generation Horween tanners.²²⁷ One hundred and fourteen years from its founding, the Horween Leather Company is the only tannery that produces Chromexcel, one of the last tanneries in the world to tan shell cordovan, and the lone surviving and thriving tannery in Chicago. The story of family, tradition, and quality are recorded in the staining on the tannery’s brick walls.

Chapter 6

‘THERE IS NOTHING NEW IN LEATHER WORK, ONLY THINGS THAT HAVE BEEN FORGOTTEN AND REDISCOVERED’

The United States’ 1917 entrance into World War I brought sweeping change to Chicago’s leather industry. Hide dealers, tanneries, and leather tradespeople in the city were called upon to increase their production of such finished leather products as boots, gloves, jackets, and mechanical belting for the war effort. In order to maintain output, new technologies and techniques were developed to expedite both the tanning process and the manufacturing of goods.\(^{228}\) The need for such products put hides and skins in excessive demand, and, in turn, inflated the prices of the animal by-product in the United States. This was beneficial to meatpacking companies, as it was estimated that during the war hides and skins provided “10-12 per cent of the gross value of the total [meatpacking] products.”\(^{229}\) Furthermore, although there was a noticeable trend toward leather substitutes and synthetics before World War I, the high prices of leather during the war period further increased the popularity of rubber for the soles of shoes and pyroxylin coated textiles for upholstery.\(^{230}\)

Research for this thesis explored the industrial history of Chicago’s leather industry up until 1917. The selection of this year occurred rather organically, as the United States’ involvement in World War I transformed the city’s leather industry and brought about a whole new and different collection of stories, questions, concerns, and

\(^{228}\) Rogers, *Practical Tanning*, 220-1.


material sources for modern researchers to rediscover. Additionally, as thoroughly as this thesis has attempted to reconstruct the city’s leather industry from 1886 to 1917 through individual vignettes, there are still questions to be answered and topics to explore during this time period. For example, W.N. Eisendrath and Isidore Horween were both Jewish, and their personal beliefs on tanning pigskins or non-kosher hides is not known. Further inquiry also remains regarding the architects who designed the many tanneries that once occupied the Tannery District. Very few factories have been attributed except for those identified by noted historical preservationist Richard Nickel—of which he attributed one to Louis Sullivan and Dankmar Adler of the Auditorium Building in Chicago and the Wainwright Building in St. Louis.\footnote{Richard Nickel, Illinois Leather Company Factory (1893) research file, Box.FF 64.19, Richard Nickel Archive, 1850-2011, 2010.6, Ryerson and Burnham Archives, Ryerson and Burnham Libraries, The Art Institute of Chicago.}

Questions also persist about child labor in the leather industry and the early artistry that went into making the famous six-horse hitch harness style known as the ‘Chicago harness.’

The importance of the rediscoveries made here, and those of future explorations that are sure to come by others, are recognizable in museums and historic sites in the United States. As true today of leather as it was when John Waterer composed it in 1946,

Here is a material which probably has a wider and more varied range of utility than any other; which abounds in interest; but one, nevertheless, about which the average individual probably knows less than he does about any other substance that daily ministers to his comfort or his pleasure; one which he usually takes for granted.\footnote{Waterer, \textit{Leather in Life}, 19.}
A greater number of leather objects from the time period covered in this project will enter the exhibit spaces and storage areas of the aforementioned cultural institutions over the next several decades. It is with great hope that museum professionals, scholars, and connoisseurs will have a better understanding of the materiality, origin, and craft of leather. Although leather objects from Chicago will likely make up only a fraction of those that enter museums and historic sites, the city’s leather industry represents an archetypal case study for what was similarly occurring in other major cities like Philadelphia, Boston, and New York between 1886 and 1917.

Today, much of the American tanned leather displayed in major museums on the East Coast dates to before the commercial production of chrome tanning in the 1890s. These leathers were often tanned through much simpler processes than what has been described, in confidence that one might use this thesis to examine leather objects in museums and better understand how they came to be, from animal by-product to finished leather goods. However, the way in which collections are managed in museums can make connoisseurship of the material challenging. Waterer’s observation of the classification of leather in English museums also stands true in American museums today:

> Although leather is included with furniture and woodwork in one of the departments of the V. and A. and although the collection includes some outstanding examples of craftsmanship, to be sought in various sections such as dress, bookbinding, the mediaeval wonders of the Salting bequest and so on, it is not nearly comprehensive enough to provide a complete picture of this wonderful craft whose history stretches back into the dim ages. Many other museums contain fine examples of leather craft, including the London Museum, but they must be sought with diligence involving a degree of leisure denied to all but a few.\textsuperscript{233}

\textsuperscript{233} Waterer, \textit{Leather in Life}, 265.
Major public museums around the world have deterred the material literacy of leather by means of their organization and classification of objects crafted from the medium. In the last thirty years, conservators have made perhaps the greatest strides in understanding the materiality of leather in American museums. During his tenure as a conservator at the Winterthur Museum, Bruno Pouliot became the foremost expert on leather objects and contributed extensively to the material literacy of leather through his teaching, scholarship, and practical application. His 2015 seminal study with fellow Winterthur conservator Lara Kaplan and Bard Graduate Center’s Dr. Jennifer Mass, used “x-ray fluorescence spectroscopy (XRF) to detect the presence or confirm the absence of chromium in skins and hides prepared with the most common tanning, semi-tanning, and other processing methods used on historical leather artifacts.” They concluded that XRF is an effective and non-invasive tool for identifying chrome tanned leather. These findings now allow museums to conclusively determine which of their objects have been chrome tanned. Their results are groundbreaking for further increasing the understanding of leather. With more innovative research on the horizon, museums are sure to rediscover their forgotten leather objects.

The journey of leather, like that through Chicago’s leather industry, began as hides and skins in a slaughterhouse near a flowing water source. The animal by-product was then chemically changed by way of water and tanning agents according to the recipes of tanners. The leather was later crafted into finished products by the hands of tradespeople and was utilized in the daily lives of consumers. This thesis is but a humble effort to begin the study of the material culture of leather in the United States.

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Appendix A

LEATHER GLOSSARY

Terms Related to Hides and Skins

Alligator: Alligator, crocodile, and related types.
Buckskin: Deer and elk skins, having the outer grain removed.
Bullhide: Hide from a male bovine, capable of reproduction.
Cabretta: A hair-type sheepskin; specifically, those from Brazil.
Calfskin: Skin from a young bovine, male or female.
Capeskin: From a sheep raised in South Africa.
Carpincho: A water rodent native to South America; like pigskin.
Cattlehide: General term for hides from a bovine of any breed or sex, but usually mature; includes bullhide, steerhide, cowhide, and sometimes kipskins.
Cordovan: From a section of a horsehide called the shell [(buttocks)].
Cowhide: Hide from a mature female bovine that has produced a calf.
Deerskin: Deer and elk skins, having the grain intact.
Doeskin: From sheep or lambskins, usually with the grain removed.
Flesher: The underneath (flesh side) layer of a sheepskin which has been split off. Used to make chamois.
Goatskin: Skin from a mature goat.
Hair Sheep: Sheep from several species whose “wool” is hair-like.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Heifer</td>
<td>A female bovine, under three years of age, that has not produced a calf.</td>
</tr>
<tr>
<td>Hide</td>
<td>The whole pelt from large animals (cattle, horse, etc.).</td>
</tr>
<tr>
<td>Horsehide</td>
<td>Hide from a horse or colt.</td>
</tr>
<tr>
<td>Kangaroo</td>
<td>From the Australian kangaroo or wallaby.</td>
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<tr>
<td>Kidskin</td>
<td>Skin from a kid, or young goat.</td>
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<tr>
<td>Kipskin</td>
<td>Skin from a bovine, male or female, intermediate in size between a calf and mature animal.</td>
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<tr>
<td>Lambskin</td>
<td>Skin from a lamb, or young sheep.</td>
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<tr>
<td>Lizard</td>
<td>Any of a great number of the lizard family.</td>
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<tr>
<td>Mocha</td>
<td>Middle-east hair sheep, usually with the grain removed.</td>
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<tr>
<td>Ostrich</td>
<td>From the two legged animal native to North Africa.</td>
</tr>
<tr>
<td>Peccary</td>
<td>From a wild boar native to Central &amp; South America; like pigskin.</td>
</tr>
<tr>
<td>Pelt</td>
<td>An untanned hide or skin with the hair on.</td>
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<tr>
<td>Pigskin</td>
<td>Skin from pigs and hogs.</td>
</tr>
<tr>
<td>Rawstock</td>
<td>General term for hides or skins that a tanner has received in a preserved state, preparatory to tanning; a tanner’s inventory of raw material.</td>
</tr>
<tr>
<td>Sharkskin</td>
<td>From certain of the shark species.</td>
</tr>
<tr>
<td>Shearlings</td>
<td>Wooled sheep and lambskin, tanned with the wool intact.</td>
</tr>
<tr>
<td>Sheepskin</td>
<td>Skin from a mature sheep.</td>
</tr>
<tr>
<td>Skin</td>
<td>The pelt from small animals (calf, sheep, goat, etc.)</td>
</tr>
<tr>
<td>Skiver</td>
<td>The thin grain layer split from a sheepskin.</td>
</tr>
</tbody>
</table>
Snake: Any of a number of the snake species.
Steerhide: Hide from a mature male bovine, incapable of reproduction, having been raised for beef.
Walrus: Skin from a walrus; also, sometimes sealskin.
Water Buffalo: Flat-horned buffalo, primarily from the tropics.

Terms Related to Tanning Processes

Aniline Finish: Full grain leather which has been colored with dyestuffs rather than pigments. Usually topped with a protein, resin, or lacquer protective coating; can also be waxed.
Bark Tanned: See “Vegetable Tanned”
Boarded: A grain effect produced by folding a skin grain against grain and mechanically rolling the two surfaces back and forth against each other.
Chrome Tanned: Leathers which have been tanned with soluble chromium salts, primarily basic chromium sulfate. Currently the most widely used tannage in the U.S.A.
Combination Tanned: Leathers tanned with more than one tanning agent. For example, initially chrome-tanned followed by a second tannage (called a retan) with vegetable materials.

Embossed: A mechanical process of permanently imprinting a great variety of unique grain effects into the leather surface. Done under considerable heat and pressure.

Full Grain: Grain leather in which only the hair has been removed. Usually carries either an aniline or glazed finish.

Glazed Finish: Similar to an aniline finish except that the leather surface is polished to a high lustre by the action of glass or steel rollers under tremendous pressure.

Grain Leather: Hides and skins which have been processed with the grain, or outer surface, dressed for end use.

Imitation: A variety of materials which have been made to resemble genuine leather. The great bulk of these are rubber or plastic coated fabrics. It is unlawful to use terms connoting leather to describe imitations.

Leather: The pelt of an animal which has been transformed by tanning into a non-putrescible, useful material.

Mineral Tanned: Leathers which have been tanned by any of several mineral substances, notably the salts of chromium, aluminum, and zirconium.

Oil Tanned: Leathers tanned with certain fish oils. Produces a very soft, pliable leather such as chamois.

Pigment Finish: A process of coloring and coating the leather surface with colored pigments dispersed in film-forming chemicals.
called binders. The latter can be tailor-made to produce surfaces that are highly resistant to wear, fading, etc.

**Retan:** See “Combination Tanned”

**Side Leather:** Cattlehide grain leather which, prior to processing, has been cut in half forming two “sides.” Purpose is to reduce the size to better accommodate tannery equipment. Represents the largest volume of commercial leather currently produced.

**Snuffed:** Grain leather which, in addition to hair removal, has had the outer surface lightly removed by buffing.

**Split:** The underneath layer of side leather which has been “split off. Devoid of a natural grain, it may be either sueded or pigment finished and embossed.

**Suede:** Leathers that are finished by buffing the flesh side (opposite the grain side) to produce a nap. Term refers to the napping process, and is unrelated to the type or skin used.

**Synthetic:** See “Imitation”

**Top Grain:** See “Full Grain”

**Vegetable Tanned:** Leathers which have been tanned with vegetable materials that are derived from certain plants and woods, often called bark tannins.
Terms Related to Leather Goods

Bag, Case, & Strap: Cattlehide leather used to make travel bags and suitcases. Does not include handbag leather.

Belt: Leather from which waist belts are made. Not to be confused with belting leather.

Belting: Heavy cattlehide leather used to make belts for the transfer of power in machinery.

Bookbinding: Used for covering books, picture frames, etc.

Case: See “Bag, Case & Strap”

Chamois: The product of oil tanning the underneath layer (called a “flesher”) that has been split from a sheepskin.

Diploma: Usually vegetable tanned sheepskin used in making diplomas.

Glove: Sheep, pig, deer, and kidskin that has been tanned to produce a soft, stretchy leather for dress gloves. Also, cattlehide splits, sheepskin, and others that are tanned for garden and work gloves.

Handbag: Any of a variety of leathers used for women’s handbags.

Harness: Vegetable tanned cattlehide leather finished for harness and saddlery use.

Hat: Vegetable tanned calf or sheepskin leather used for hat sweatbands.

---

**Insole:** A shoe leather used for the inner sole which the foot rests upon. Usually from cattlehide.

**Lining:** A shoe leather used for lining the inside portions. Made from all kinds of hides and skins, either grain or suede finished.

**Novelty:** Any of a variety of leathers, frequently vegetable tanned, used for billfolds and small leather goods.

**Outsole:** A shoe leather used for the outer soles. From vegetable tanned cattlehide, often quite thick.

**Patent:** A shoe leather, heavily finished to give a highly lustrous, bakedenamel type appearance, used for shoe uppers. Generally from cattlehide.

**Shoe:** General term including all upper, lining, and sole leathers.

**Slipper:** Cowhide and sheepskin leathers, usually chrome tanned, used for slipper uppers.

**Sole:** See “Insole” and “Outsole”

**Strap:** See “Bag, Case, & Strap”

**Sweatband:** See “Hat”

**Upholstery:** Large cattlehide, split thin, and tanned for use as furniture and automobile seat coverings.

**Upper:** A shoe leather used for the upper portions. Predominantly from cattlehide and calfskins, although a great variety of skins are used. Usually combination tanned.
Appendix B

IMAGE PERMISSIONS

Ryerson and Burnham Archives, The Art Institute of Chicago: Figure 1

THE ART INSTITUTE OF CHICAGO
111 SOUTH MICHIGAN AVENUE CHICAGO, IL 60603-6410 USA

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Lois F. McNeil Fellow
Winterthur Program in American Material Culture
University of Delaware
rlara@winterthur

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Hi Richard,

Attached is the photo you requested and there is no fee. We just ask that you credit the Illinois State Archives for providing the photo. Please let me know if this file will work for you. If you have any further questions, please feel free to contact me.

Cathy

-----------------
Catheryn Popovitch, Supervisor
Operations Section
Illinois State Archives
Margaret Cross Norton Building, 1/W
Springfield, IL 62756
217-524-6700
cpopovitch@ilsos.net

REGARDING: Illinois State Archives Reference Services

MESSAGE: Dear Illinois State Archives,

I’m a graduate student at the University of Delaware and I’m currently in the process of writing my master’s thesis.

I am emailing you today to request a high resolution reproduction of a photograph in your collection and permission to reproduce the image in my thesis. My thesis will be available in one printed copy in the Winterthur Museum’s (my graduate program sponsor) thesis collection in the library and UDspace, an online university of Delaware thesis database. It will not be widely disseminated. I understand that I may be required to pay a fee.

I do not have a photo identification or collection number, and I cannot find the photo in digital form on your website. Written on the photo are the numbers, “15807” and that date “8-15-29.” I do know that the photo was published in the 2014 book “Avondale & Chicago’s Polish Village.” The photo can be found on the top of page 23. Here is a link where you can preview the book and see the picture on page 23: https://books.google.com/books?id=8ygT8AAQBAJ&printsec=frontcover#v=onepage&q&f=true.

The photo was taken in 1929 and depicts the North Branch of the Chicago River and the Greenebaum Tanning Company.

Please, let me know if there is anything I can do to aid in further identifying the photo.

Thank you for all of your help.

Best,

Richard Lara
Chicago History Museum: Figure 5, Figure 12, and Figure 13

Dear Richard,

Thank you for contacting the Chicago History Museum.

Since these images have no known copyright affiliations, you do not need our permission to reproduce them now or in the future. The fee you paid was simply for the high-resolution files.

I was able to locate the image you inquired about, and it's now published on our images website. Feel free to search for it using its image ID number, ICHI-040228, and purchase it just as you did the previous two images. Again, this image has no known copyright restrictions, so you're free to reproduce it as you please without our permission.

Please allow up to 24 hours for this image to preview on our images site. If you have trouble locating the image, just let me know and I'll add it to your user account manually.

Best,
Katie Levi

Rights & Reproductions
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rightswith@chicagohistory.org
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Sent Items

Richard Lara
Mon 3/21, 6:37 PM
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Sent Items

Dear Rights and Reproductions,

I hope you are having a wonderful day.

I'm a graduate student at the University of Delaware and I'm currently in the process of writing my master's thesis.

I am emailing you today to request permission to reproduce two images in my thesis that I have already paid for through your website. I have attached my payment form to this email. My thesis will be available in one printed copy in the Winterthur Museum's thesis collection in their library (Winterthur sponsors my graduate program) and on UDspace, an internal online University of Delaware thesis database.

Second, I am requesting a high resolution reproduction of a photograph in your collection that currently cannot be purchased through your online database. I am also requesting permission to reproduce this image in my thesis as well. I understand that a fee will be required.

The information for the image is below and here is a link to the digital photo on the "Encyclopedia of Chicago" [http://www.encyclopedia.chicagohistory.org/pages/5053.html]:

- Leather workers manufacturing suitcases, c. 1900.
- Photographer: Ed Stratton
- Source: Chicago Historical Society (ICHI-21789)

If this doesn't make things too complicated, I would actually rather have a different photo from this series of pictures taken by Ed Stratton. The only problem is that I do not know the reference number for that image. The image can be seen reproduced in this article [https://www.nainfo.com/chicago/20151018/lincoln-quick-old-lutman-tannery-site-become-ho-for-logistics-category/]. If the image cannot be reproduced then I will be more than happy with ICHI-21789.

Please, let me know if there is anything else you need from me.

Thank you for all of your help and have a great rest of your day.

Best,
Richard Lara
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Richard Lara
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1311:Social-base-map-of-Chicago---shown!/
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University of Delaware and the Winterthur Museum, Garden & Library Internal
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Master’s Thesis - American Material Culture
University of Delaware and the Winterthur Museum, Garden & Library

My thesis will be available in one printed copy in the Winterthur Museum’s thesis collection in their library (Winterthur sponsors my graduate program) and on VDSpace, an internal online University of Delaware thesis database. email: rlara@winterthur.org submitted from: SCRIPtook.html
Winterthur Library, Joseph Downs Collection of Manuscripts and Printed Ephemera:

Figure 10

4/10/2019

Richard Lara
300 East Evans St., Apt. C209
West Chester, PA 19380

Permission is granted to include the image listed below in 'It was in the Water': Chicago's Leather Industry, 1886-1917 by Richard Lara, to be published as a master’s thesis at the University of Delaware in Spring 2019.

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Sven Raphael Schneider <contact@gentlemansgazette.com>

Wed 4/3, 5:46 PM
Richard Lara

Yes, please use it, and add a link www.gentlemansgazette.com Thank you!

Kind regards,
Raphael - Founder Gentleman's Gazette

Richard Lara
Mon 4/1, 7:31 PM
Sven Raphael Schneider <contact@gentlemansgazette.com>

Sent Items

Dear Raphael,

I'm sorry that it has taken me a bit to get back to you. Please find below my forwarded conversation with Nick Horween. He has given me permission to use the photo of Isidore Horween and his family.

If you also give me permission to publish the photo in my master's thesis, please let me know if there is a fee attached. As I stated before, I am more than happy to keep your watermark on the photo. Additionally, the caption will read, "Courtesy of the Gentleman's Gazette, with permission from Nick Horween of the Horween Leather Company."

Please let me know if you would like the caption to be written in any other way.

Thank you for all of your help and I look forward to hearing back from you.

Best,
Richard Lara

Nick Horween <nick@horween.com>
Mon 4/1, 1:57 PM

Re,

You can go ahead and use that photo, thanks for asking.

Isidore is how he signed his name and it was Marion.

Best Regards,
Nick Horween
Hi Nick,

I’m sorry to bombard you with questions again when you have a business to run. Now that I’m wrapping up this thesis I have a couple last things to ask you, if you’d be willing to answer them.

The first is your’s and your father’s preference on the spelling of your great-great grandfather and great-great grandmother’s name in my thesis. Would you prefer Isidore or Isodore and Marion or Marian? In government documents your great-great grandmother went by Marion, but I’ve also seen it spelled the other way. I can’t quite pin down the exact spelling of your great-great grandfather’s because it was spelled so many ways in documents and directories. On your website it is spelled Isidore so that is how I have it spelled as of right now.

Secondly, I reached out to Raphael Schneider, founder of Gentleman’s Gazette, who wrote an article on your company in 2012 and snapped a picture of the family photo I was asking you about last week (here is the article: https://www.gentlemansgazette.com/horween-leather-company-chicago/). Raphael said he would send me the digital photo he took, but only if you okay it since your family holds the original photo and its copyright. Is it okay with you if he sends it to me and if I publish it in my thesis? If not, no worries at all.

Have a great weekend!

Best,
RJ Lara

Dear Richard,

This is the only picture I have but since it is a photo of an original, Horween is the copyright holder, so you have to ask them for permission, not me. If they say it is ok, I am ok with it.

Kind regards,
Raphael - Founder Gentleman’s Gazette

Dear Gentleman’s Gazette,

I’m a graduate student at the University of Delaware and I am currently in the process of writing my master’s thesis.

I am emailing you today to inquire about a picture of Isadore Horween and his family in your 2012 article “Horween Leather Company Chicago” (https://www.gentlemansgazette.com/horween-leather-company-chicago/). I am wondering if you would allow me to reproduce the image in my thesis? My thesis is examining the leather industry in Chicago at the turn of the 20th century.

What I am requesting is a digital reproduction of the photograph and your permission to reproduce the image. My thesis will be available in one printed copy in the Winterthur Museum’s (my graduate program sponsor) thesis collection in the library and UDSpace, an internal online University of Delaware thesis database. It will not be widely disseminated.

Thank you for all of your help and I look forward to hearing back from you.

Best,
Richard Lara
Nick Horween, Horween Leather Company: Figure 18

Richard Lara
Sun 3/7/10 10:42 AM
Nick Horween <nick@horween.com>  

Hi Nick,

I'm a graduate student in the Winterthur Program in American Material Culture at the University of Delaware, and I'm writing my master's thesis on the history of the tannery industry in Chicago at the turn of the 20th century. Last July I stopped by the tannery and took a tour with you.

I'm finally starting to wrap up my thesis and I've had a great time uncovering some of the forgotten history of tanning. My thesis largely focuses on the W.N. Eisdorff's tannery and the Eisdorff Glove Co. which operated next to yours. I'm primarily focusing on the Eisdorffs because I found quite a bit of material on their tanning operations in different museums and libraries around Chicago. You also sparked my interest about the importance of water in the tanning process, so I wrote a chapter on that with relation to Chicago's water sources. My chapter on your great-great grandfather Isidore, looks at the transition between veg tanning and chrome tanning in early 20th century tanneries.

In my thesis, I would like to reproduce the photograph of Isidore seated with his workers in the beam house of the tannery. I am wondering if you would be open to send me a digital reproduction of the photograph and your permission to reproduce the photograph in my thesis? This is one of the rare photographs I can find of workers inside of a tannery in Chicago at the turn of the century.

My thesis will be available in one printed copy in the Winterthur Museum's thesis collection in the library and on UDspace, an internal online University of Delaware thesis database. Many libraries and museums charge a fee to reproduce their images so I would be happy to pay you for this.

I hope all is well!

Cheers,
RJ Lara