

*Manhattanville and New York City's Milk Supply*  
By Mary Habstritt

### **Death by Milk**

During New York's colonial period and into the 1800s, cows were kept in town and grazed on public pastures or squares. As the city grew, farmers on the outskirts supplied milk to vendors who carried it to town and peddled it from house to house, filling pitchers from buckets hung from shoulder-borne yokes or carried in horsedrawn carts. Due to its perishability, milk had to be delivered to the city twice a day in summer from farms in Brooklyn and the Bronx. As pastures were pushed further and further from the city in the days before refrigeration it became impossible to transport milk without spoilage and other means had to be found to provide a milk supply to a rapidly growing population.<sup>i</sup>

One effort brought the cows back to the city, but not to graze on the village green. Beginning in the 1820s or 1830s, distillery owners created a market for the grain mash left from the distilling process by selling it as cattle feed. Farmers could rent stalls at the distillery and feed their cows this slop at minimal cost. Although cows gave more milk on this high-calorie diet, it was of poor quality because the animals got no exercise and lived in filthy conditions. The thin blue "swill" milk was often doctored with additives, such as starch, plaster, chalk, eggs or annatto (a dye derived from the seed of a tropical plant), to give it a more attractive color. Although other cities also had swill dairies, nowhere was the infamous beverage more prevalent than in New York.<sup>ii</sup>

The swill milk soon launched a pure milk movement. One of the leaders was Robert Milham Hartley, an activist probably more interested in impoverishing the distillers for the temperance cause than in lowering the death rate caused by the unhealthy milk. He was instrumental, however, in bringing public attention to the problem which was profound. One of every two children in the city died before the age of five in 1841, many from tuberculosis, typhoid or diarrhea-causing bacteria carried in milk. An investigation launched by the New York Academy of Medicine in 1848, an exposé in *Frank Leslie's Illustrated Weekly* in 1858, and an ensuing investigation by New York City's Board of Health resulted in the swill milk being denounced by scientists as detrimental to the health of children. Eventually, an 1875 law outlawed the sale of milk from distillery-fed cows. Zealous enforcement by Dr. Samuel R. Percy of the Academy of Medicine and others led to eradication of the swill dairies in Manhattan, yet in 1904 a new city health commissioner found upon taking office that thousands of cows were still being fed distillery slop in Brooklyn.<sup>iii</sup>

The "certified milk" movement was one response to the need to safeguard milk for infants. It was initiated in 1891 by leading physicians of the Harvard Medical School working at the Walker-Gordon Laboratories in Boston. Its goal was to provide milk for which the production and processing were carefully controlled from cattle feed to city

distribution. It was found that even moderate precautions taken on the farm reduced the bacteria count in fluid milk dramatically. Inspired by the work in Boston, Henry L. Coit of Newark, New Jersey coined the term “certified milk” to describe milk whose quality was supervised by a commission made up of physicians. The doctors inspected not only the cows, but the land, buildings, and water at the dairy farm and put all collecting and handling procedures under the severest scrutiny. Dozens of milk commissions were established around the country in the early 1900s, but it was a cumbersome and expensive way of obtaining pure milk. Pasteurization, on the other hand, lent itself to factory application and was therefore a more practical and economical method for protecting the milk supply.<sup>iv</sup>

The campaign for universal pasteurization by force of law began in New York City in 1889. This was done through street-level campaigns by activists to educate the public. Dr. Henry Koplik opened the first milk dispensary to distribute pasteurized milk and teach mothers about infant hygiene. The campaign gained momentum when Nathan Straus, head of R.H. Macy’s, New York’s largest department store, decided the time had come to stop the terrible waste of human life. He felt the clinical approach of dispensing pure milk in an apothecary atmosphere was not effective in reaching the masses. In June, 1893, he opened his first milk depot on the East Third Street Pier. It was a combination laboratory and recreation center where a small pasteurizing and bottling plant was adjacent to a pavilion with tables and chairs. Mothers could come with their children for rest and refreshment and attend twice-weekly lectures on child care and nutrition. A pediatrician was always on duty to give free medical examinations. And always, “the best possible milk for children could be obtained at a nominal price.”<sup>v</sup>

Straus opened six depots the next year and had 17 in operation by 1906. Eventually he developed a central milk plant to meet demand but realized he could never reach everyone in the city so he merchandised the “Nathan Straus Home Pasteurizer.” Ironically, some of the women living in tenements on the Lower East Side were pasteurizing before many dairies were.<sup>vi</sup>

The effect of the milk dispensaries was dramatic. Before Straus began, the death rate was 96.2 per 1,000 children under the age of five and in the hot summer months it leapt to 136.4 per 1,000. The mortality rate by 1906 had fallen to 55 per 1,000 and the summer rate to 62.7. A scientific experiment in 1898 had already proven the point. Abandoned and orphaned children institutionalized at Randall’s Island were fed the best milk from a carefully selected herd kept on the island from 1895 to 1897. This resulted in a death rate of 42 percent. Then, Straus opened a pasteurization plant there and mortality dropped to 28 percent. No other change in diet or hygiene was made.<sup>vii</sup>

In 1895, Straus launched a national campaign with letters to mayors of major cities offering to establish his depots anywhere he was asked. By the early 1900s many milk depots patterned on the Straus dairies had been opened in Brooklyn, Yonkers, Newark, Pittsburgh, Cleveland, Chicago, Philadelphia, St. Louis, Boston and Baltimore. Citizen leagues were formed to support establishment of such depots, including the East Side

Pure Milk League which lobbied New York City aldermen to fund booths in city parks to dispense pasteurized milk to the poor.<sup>viii</sup>

Manhattanville citizens were also active in the pure milk movement. Ethel M. Wagoner Hooke (better known in the society pages as Mrs. Edward W. Hooke) and Minnie M. Cook, both residents of 552 Riverside Drive, along with other society women, incorporated the International Pure Milk League in 1910. The league's mission is "to foster and encourage the production, and consumption of pure milk and pure food generally; to foster and promote the common interests of producers, dealers, and consumers of milk, and all other articles of food; to foster and promote methods of cleanliness in the handling of milk and all other articles of food from the producer to the consumer throughout the civilized world; to foster and promote local and foreign organizations of similar purpose with or without the league as a central or parent body." The International Pure Milk League maintained a Babies' and Children's Welfare Station and a Mother's Club at 2378 Old Broadway in Manhattanville. During the summer and winter of 1913, the league's milk station dispensed pure milk to sixty babies, and provided outings in Van Cortlandt Park to a great many children under 5 years of age.<sup>ix</sup>

The New York City Health Department had begun the first municipal laboratory in the country in 1893. Its head, Dr. William H. Park, focused on the practical application of methods to diagnose, prevent, and treat common infectious diseases. Among the plagues which received his attention was the high infant mortality rate from contaminated milk. An appropriation from the Rockefeller Institute in 1901 assisted researchers in studying the relation of pure and contaminated milk to the health of infants. By 1905, the Department of Health had full control of all milk sold in the city by requiring all milk traders to be licensed and as a condition of licensure, traders had to allow inspection of his suppliers' creameries and farms. It was an innovative way to control contamination at the source even though the sources were outside the city's jurisdiction. Further experiments in comparing certified milk to pasteurized milk and a milk-borne typhoid epidemic in 1913, finally made pasteurization compulsory in 1914. Procedures to reduce bacterial contamination in milk production at every stage and the introduction of refrigeration and pasteurization eventually provided New York with the safest milk supply in the world and set standards for other cities to duplicate.<sup>x</sup>

### **New York Entrepreneurs to Conglomerates**

Enterprising dairy farmers outside the city had early on advertised the purity of their fresh country milk to compete with the swill dairies. One of these was Thompson W. Decker who, after a job milking cows on an estate in Morrisania and delivering the milk to the city, began his own milk route in 1841. Founded as T.W. Decker, it was re-named T.W. Decker & Sons in 1890. Thompson Decker drove the first route himself and opened his first store at 309 E. 27<sup>th</sup> Street. That store became the company's headquarters for the next 40 years until it moved to 63<sup>rd</sup> Street and Park Avenue by which time it had 19 city routes. Decker headed the company for 61 years, signing consolidation papers on his deathbed in 1902 to merge it with Slawson Brothers, Sheffield Farms, and two other

dairies to form Sheffield Farms-Slawson-Decker. By that time, T.W. Decker & Sons had 33 delivery routes and three stores as well as its original dairy in Morrisania.<sup>xi</sup>

In the 1860s, Decker had purchased 400 acres in North Salem, New York and stocked it with 150 cows, buying milk from other farmers as the business grew. He is credited in company history with being the first New York City milk dealer to use the railroad to bring milk from Westchester by convincing the New York and Harlem Railroad to carry it by train. He had a keen sense of the value of advertising and public relations, inviting reporters to view operations at the farm and showcasing the safeguards in place to keep milk pure. The importance of opening facilities to public inspection became a key trait of the company through the 20<sup>th</sup> century.<sup>xii</sup>

L. B. Halsey, a lawyer who married Ann Maria Sheffield, became interested in the dairy business when called upon to help deliver his widowed mother-in-law's butter. Through careful selection and breeding the Sheffield herd of Mahwah, New Jersey produced superior milk, which in turn made fine butter. He began marketing the butter in his spare time in the city and by 1880 had given up the law to devote himself to the dairy trade. His first innovation was to design a covered milk wagon that protected fluid milk from dust. Halsey trained other farmers to improve the quality of their milk and bought milk only from the best herds.<sup>xiii</sup>

In 1892, he installed the first pasteurizing machine in the United States, imported from Germany, at Sheffield Farms' Bloomville, New Jersey plant. The following year, pasteurization was demonstrated at the Columbian Exposition in Chicago. Commercial milk pasteurization was introduced in Baltimore in 1893 but Cincinnati is credited with the first large scale pasteurization program in America. New York followed in 1898 although pasteurization was not yet required for some years.<sup>xiv</sup>

Slawson Brothers entered the milk distribution business in 1866. Loton H. Horton, a Slawson on his mother's side, began driving a milk wagon for his uncle when he was 16. He quickly rose to lead the company, becoming a partner at the age of 21 and principal owner in 1898. When the company merged with T.W. Decker and Sheffield Farms, he became the new firm's president, a post he held until his death in 1926. At that time, Sheffield Farms Co. (the name was eventually shortened from Sheffield Farms-Slawson-Decker) was the largest dairy products company in the world with nearly 2,000 retail routes and over 300 stores, mostly in New York City.<sup>xv</sup>

Just before his death, Horton had sold the company to the National Dairy Products Corporation. National Dairy Products was formed in 1923 as a merger of several dairy concerns and continued to grow through acquisitions, the most important of which was the addition of Sheffield Farms. Others included Breyer Ice Cream, also purchased in 1926, and Kraft-Phenix Cheese Corporation in 1930. All of the companies continued to operate independently, marketing products under their recognized brand names. In 1969, National Dairy Products became Kraftco and then Kraft in 1976.<sup>xvi</sup>

Gail Borden, like many of the pure milk reformers, was inspired by children's deaths to create a method for improving the safety of milk. A native of Norwich, New York, he led a peripatetic life, living in Kentucky and Indiana and holding such jobs as a surveyor in Mississippi, a newspaper publisher in Houston and a land agent in Galveston, Texas. He was also a tireless inventor, his creations including a sail-powered wagon—a true prairie schooner—and the lazy Susan. The difficulties of procuring and storing food experienced by travelers across the plains led him to develop a type of dried meat biscuit. Said to be unsavory but serviceable, it was a commercial failure but recognized as a scientific breakthrough. He was invited to receive the Great Council Medal at the London World's Fair in 1851. During his passage back to America, he saw several children die on board ship from drinking contaminated milk.<sup>xvii</sup>

Working with a method based on vacuum pans used by the Shakers to preserve fruit, he was able to remove most of the water, which he felt was the reason for milk's spoilage. It was actually the heat used in the evaporation and canning processes that killed the bacteria and preserved the milk. After patenting the process in 1856, he opened a sales office in New York City but the public took little notice of canned milk at the time so he returned to Texas in search of capital. Borden resumed production the following year in Connecticut under the name Gail Borden, Jr., and Company. He continued to struggle financially until he formed a partnership with Jeremiah Milbank, a wholesale grocer, banker, and railroad financier. The New York Condensed Milk Company fortuitously took out its first ad in the very issue of *Frank Leslie's Illustrated Weekly* in 1858 that denounced the swill dairies and the company was soon delivering condensed milk throughout lower Manhattan and Jersey City. In 1861, the U.S. government began ordering condensed milk for its troops and business increased so that Borden had to license the process to other manufacturers to keep up. After the Civil War, the company had a ready-made customer base in war veterans.<sup>xviii</sup>

After Borden's death in 1874, his sons managed the company and diversified into delivery of fluid milk in 1875. Ten years later, the company pioneered the use of glass bottles for milk distribution. In 1899, as profits from fresh and condensed milk operations grew, the company was incorporated as the Borden Condensed Milk Company. William J. Rogers, the first president from outside the family, took over in 1902. He was succeeded by S. Frederick Taylor in 1910 who oversaw the building of new evaporation and canning facilities as well as pasteurization and bottling plants in the company's strongholds in New York, New Jersey, and Illinois. In the decade after World War I, the company saw explosive growth and the Borden Company, as it was re-named in 1919, went on a buying spree that turned it into a multinational conglomerate. The company purchased more than 200 companies around the country between 1927 and 1930, becoming the nation's largest distributor of fluid milk.<sup>xix</sup>

These acquisitions included well-established dairy products companies, such as J.M. Horton Ice Cream, and food manufacturers outside the dairy industry, such as the Merrell-Soule Company which made None Such mincemeat as well as Klim powdered milk, and launched its chemical division with the purchase of the Casein Company of America, which made an adhesive from casein, a by-product of skim milk. When the

economy stalled in the 1930s, profits were further eroded by new price regulations for milk. Dairy farmers formed cooperatives to set prices, states established milk-control boards to ensure adequate supplies and low cost for the consumer. Distributors like Borden were forced to pay more for milk but prevented from passing the cost on to the consumer. Perhaps this was one reason that Borden began to concentrate on building its adhesives and chemical businesses through the 1950s. It did not neglect its food divisions, continuing to acquire such well-known brands as RealLemon lemon juice, Cracker Jack candied popcorn, and Wise potato chips into the early 1960s. In the late 1960s, however, all the divisions were trimmed of unprofitable facilities during an austerity program and the 1970s saw a period of slow growth.<sup>xx</sup>

## **The Milk Trains**

Until the mid-19<sup>th</sup> century, dairy farmers converted most of their milk into butter which could be shipped without spoiling and stored for relatively long periods. Fluid milk was consumed only very locally in the days before refrigeration. Milk trains transformed dairy farm production in New York state's "milkshed" as farmers had a new and growing market for fluid milk, which was more profitable and less laborious than making butter.<sup>xxi</sup>

The first rail-carried milk to reach New York City, in fact, reached the city by ferry. The Erie Railroad was the first in the country to regularly carry milk beginning in 1842. It began as an experiment for the year-old railroad conducted by Thaddeus Selleck, the station agent in Chester, New York who convinced farmers in Goshen, a town famed for its butter, to try shipping milk. It took five or six hours to reach the city. A number of select families were present to taste the milk when it was delivered to a room specially rented for the purpose on Reade Street near the Erie station. This shipment met with such success that milk quickly became an important component of the freight carried by the Erie. In 1843, it carried 4 million quarts of milk and in 1884 nearly double that amount. By 1847 a regular milk train had been established on the Erie which delivered milk to Jersey City, and then ferried it across the Hudson River to a special depot in lower Manhattan.<sup>xxii</sup>

The Erie's competitors were also carrying growing quantities of milk. The New York and Harlem Railroad, which had bridged the Harlem River in 1840 to provide the first direct freight service to Manhattan, carried 16 million quarts of country milk to the city in 1847. The New York, Ontario & Western inaugurated a daily milk train to the city via its terminal in Weehawken in 1871 and by 1902 was the largest shipper of milk, supplying one-eighth of the city's needs.<sup>xxiii</sup>

The Hudson River Railroad bridged Spuyten Duyvil Creek and had trains running into Manhattan by 1851 from as far north as Rensselaer County. It merged in 1869 with the New York and Harlem Railroad and others to form the New York and Hudson River Railroad under the leadership of Cornelius Vanderbilt. This consolidated all rail access to Manhattan under one railroad company. In 1871, Vanderbilt re-organized NYC&HRRR traffic into Manhattan by moving all freight service to the tracks along the Hudson and all passenger service to the Harlem line ending at the original Grand Central

Depot. The plan was not fully realized, however, until the rail service within the city was electrified and the current Grand Central Terminal was built beginning in 1903.<sup>xxiv</sup>

In 1933, the Museum of Science and Industry produced a pamphlet related to exhibits on the milk industry, providing a snapshot of milk train commerce. At this time, milk was the second largest perishable product handled in the New York market. It was carried by special milk trains that arrived each night after trips averaging 250 miles. Twenty-five regularly scheduled milk trains served the city with the Pennsylvania Railroad making the longest trip from upstate New York to Brooklyn in 29 hours. Manhattan was served by the New York Central which continued to hold the monopoly on freight service into Manhattan. Since its trucks had the shortest haul from the terminal, its trains were scheduled to arrive last. The New York and New Haven Railroad milk trains terminated at freight stations in the Bronx and Long Island. Other railways terminated in New Jersey and unloaded milk at platforms at their waterfront terminals and the milk finished its trip into the city on barges or ferries.<sup>xxv</sup>

Most milk was transported in 40-quart milk cans, about 300 cans to the railcar. It was kept cool either by ice bunkers at both ends of the car or ice placed directly on top of the cans. The introduction of tank cars to the New York market in 1926 is credited to Borden's Farm Products. The cars were constructed like a Thermos bottle, not refrigerating the milk, but holding it at approximately the temperature at which it was pumped in. Later tank car models had two tanks which could be transferred directly to a truck at the yard. Each tank could hold the equivalent of 300 cans, doubling capacity per car. In 1933, about 17 percent of the milk supply came in via rail tank cars. Although use of tank cars increased, milk cans continued to be used through the 1940s.<sup>xxvi</sup>

A small amount of milk, pasteurized at country plants, arrived already in bottles packed in cases but most milk was pasteurized and bottled at plants in the city. In 1933, there were 12 pasteurization plants in Manhattan, two in the Bronx, and 15 in Brooklyn. A typical schedule had milk arriving by train at 130<sup>th</sup> Street at 11:00 p.m., at the pasteurizing plant at 12:00 a.m., and ready for local distribution by 2:00 a.m. From the plants, the milk was taken by wagon or truck to branch distributing stations or delivered directly to consumers along established retail routes.<sup>xxvii</sup>

### **The Manhattanville Connection**

It was quite typical for the New York Central Railroad to establish freight yards, large and small, throughout its system and this was reflected in the several yards it established along Manhattan's West Side. "Industrial yards" served particular industries, holding railcars until they could be unloaded or loaded and often providing specialized facilities for perishable freight. In the 1930s, part of the 60<sup>th</sup> Street rail yard lying east of the main tracks was known as "the milk yard" and contained 10 tracks capable of handling up to 87 cars. This was adjacent to the main New York Central freight yard which stretched from W. 60<sup>th</sup> Street to W. 72<sup>nd</sup> Street. Milk trains were scheduled to arrive between 11:30 p.m and 3:30 a.m. daily carrying a total of 225,000 quarts of milk and cream. These rail deliveries represented about one-third of New York City's milk deliveries.

Manhattan milk plants were also served by the Manhattanville yard at W. 130<sup>th</sup> Street.<sup>xxviii</sup>

A number of dairy companies, as well as meatpackers and automobile dealerships, parts and service centers, located facilities in the Manhattanville neighborhood in the early 20<sup>th</sup> century to take advantage of the West Side Freight Line. The 130<sup>th</sup> Street yard was a team yard, a type of industrial yard with space to transfer freight from railcars to wagons or trucks. Special facilities included a “milk platform” which allowed easy transfer of milk cans from railcars to wagons or trucks. As part of Robert Moses’ massive West Side Improvement, which included downtown’s “High Line” viaduct, tracks were also elevated in Manhattanville. Three tracks (one main through-track in each direction and the siding) were placed on a viaduct between St. Clair Place and W. 135<sup>th</sup> St. to serve the meatpacking houses in the district at the second story level. This viaduct, now used by Amtrak, is sandwiched tightly between the backs of buildings along Twelfth Avenue and the viaduct carrying the Henry Hudson Parkway. It is clear that several of the existing meatpacking buildings had elevators added in shafts outside their original building envelopes to serve the freight platforms on the viaduct. The freight facilities at the 130<sup>th</sup> Street yard were enlarged and improved to provide adequate team trackage and driveways as well as additional special facilities for the handling of milk, automobiles, and heavy freight.<sup>xxix</sup>

In addition to being near the New York Central’s incoming milk trains, the Manhattanville location gave dairy companies, which before the 1940s made most of their income from home delivery, easy access to major thoroughfares for delivery to residents in upper Manhattan. That meant that the dairy companies had large stables or garages in the neighborhood in addition to depots and processing plants. The companies had similar facilities downtown, especially near the 33<sup>rd</sup> Street and 60<sup>th</sup> Street rail yards on the West Side, for distribution of fresh milk to central and lower Manhattan.<sup>xxx</sup>

Several depots and stables belonging to lesser-known dairies appear on insurance maps, but Sheffield Farms and Borden occupied the greatest number of buildings, dominating the business in Manhattanville and reflecting their importance in New York City and the nation. In a 1916 article announcing the end of a dairymen’s strike, the largest milk distributors were referred to as the “Big Three.” These were Sheffield Farms, which controlled 20 percent of the city’s milk distribution, Borden, and Mutual-McDermott, all of which had dairies in Manhattanville. Combined, they held 61 percent of the milk distribution business in New York City at the time. By 1939, Borden and Sheffield Farms were still two of the “Big Three of the Dairy Industry,” but the third member was The Dairyman’s League, which began as a bargaining association for dairy farmers. At that time, these three controlled one-third of the milk business in the New York City metropolitan area and were shipping about 60 percent of their milk by rail.<sup>xxx1</sup>

Sheffield Farms first entered Manhattanville with a two-story stable and milk depot in 1903 at 3229 Broadway. The depot was probably for staging milk cans coming in by train and transferring them to wagons for home delivery in upper Manhattan. Although “depot” was used by reformers to describe the booths and pavilions where milk was

distributed to the public, dairy companies used it to describe facilities for storage and transshipment.

The McDermott-Bunger Dairy, later Mutual-McDermott, built a plant in 1903 at 527-535 W. 125<sup>th</sup> Street. Based on the description of the Sheffield Farms pasteurization and bottling plant built a few years later to the west, the two archways at each side of the building were undoubtedly arranged so that milk wagons could be loaded and unloaded efficiently at the back of the building. The McDermott-Bunger building was acquired by Sheffield Farms in the 1920s and by Muller Dairies in the late 1930s or early 1940s. Muller Dairies at the same time occupied the building that backed on it at 518-526 W. 126<sup>th</sup> Street and the garage next to that building at 528-532 W. 126<sup>th</sup> Street. Muller Dairies and Sheffield Farms, along with Borden, were fined in 1943 for conspiring to fix milk prices so the building transfer may have reflected a very close business relationship.<sup>xxxii</sup>

Borden's Condensed Milk Co. built stables at 623-625 W. 129<sup>th</sup> Street and 628-630 W. 130<sup>th</sup> Street in 1906, its first documented appearance in the neighborhood. Although these addresses are on different streets, the buildings are actually back to back, running all the way through the block.

Clover Farms Co., a smaller distributor had 175 routes in the city in 1916. The company moved to a one-story wood frame building formerly occupied by the Manhattan Construction and Trucking Co. at 618-620 W. 130<sup>th</sup> Street around the same time (between 1916 and 1925) that it left a much larger brick stable at 614-618 W. 131<sup>st</sup> Street, which it had leased since at least 1913. The elegant five-story stable appears on insurance maps beginning in 1911. It is now one of several buildings used as warehouses by Tuck-It-Away storage. Columbia University's consultant has identified it as built in 1896 and designed by architect Henri Fouchaux. This architect was quite prolific in upper Manhattan and some of his residential buildings are included in the Hamilton Heights Historic District. He also designed the expansion of Tribeca's Powell Building by Carrère and Hastings in the Tribeca West Historic District.<sup>xxxiii</sup>

On July 11, 1909, the *New York Times* announced that Sheffield Farms Slawson-Decker would construct a \$500,000 sanitary building for pasteurization and bottling on Manhattan Street (later W. 125<sup>th</sup> Street) just west of Broadway. It was to supplement the plant at 57<sup>th</sup> Street near Tenth Avenue designed just two years earlier by architect Frank A. Rooke who would also design the new plant. The 57<sup>th</sup> Street depot served central Manhattan but was already taxed to its capacity. The new plant on Manhattan St., later re-named 125<sup>th</sup> Street, was larger than the 57<sup>th</sup> Street plant, covering twice as many lots. It occupied part of the site of the former the D. F. Tiemann & Co. paint factory, once the major industry in the area.<sup>xxxiv</sup>

The new plant was to be eight stories and faced in white glazed terra cotta. It would be as vermin-proof and fireproof as possible with brick walls on a steel frame covered in concrete. Emphasizing purity, all the machinery was to be finished in white enamel and all the staff were to wear white uniforms which would be laundered daily on site. Even

shower-baths were to be provided for the staff. The entire process would be open for public inspection with viewing balconies provided for this purpose. Contamination would be prevented by shielding equipment behind plate glass.<sup>xxxv</sup>

Two driveways with platforms running into and around the building were to allow a continuous stream of wagons to load and unload. 75,000 quarts of milk were expected to arrive daily. The milk cans would be emptied into the latest in pasteurizing machines after which it was cooled on its way to the bottling machine where already sterilized bottles were filled 12 at a time. The bottles were placed in cases with cracked ice and moved to cold storage rooms. The basement was to house the steam engines to power the machinery, including the compressors for refrigeration, as well as ice-making machinery, pumps and bottle-washing machinery.<sup>xxxvi</sup>

This magnificent plant was supported by a newly large stable at 3229 Broadway to house the horses and delivery wagons. The location between 129<sup>th</sup> and 130<sup>th</sup> is closer to the plant than the addresses would indicate as 125<sup>th</sup> Street angles northward from Broadway. At 400 feet, it was close enough for efficiency and distant enough for sanitary purposes. Also designed by Frank Rooke, the alteration called for four stories to be added on top of the existing two stories. Like the plant, its material bespoke purity with near-white terra cotta and matching brick used to clad the façade. The ornamentation has been described as echoing the accoutrements of the routemen who drove the wagons with the four tassel-like forms at the top of the pilasters tentatively identified as stylized horses' tails, but looking much like ears of corn.<sup>xxxvii</sup>

Stables were essential at the turn of the 20<sup>th</sup> century when some 7,000 work horses were in harness in New York City pulling everything from streetcars, fire trucks, vans, and wagons. Sheffield Farms in 1914 used 1,163 horses in its business compared to the 2,200 men it employed at all its locations. The company's stable in Manhattanville appears to have held as many as 108 animals. It was stoutly built with walls over 12 inches thick as thin walls let in the damp. Ensuring that the horses were warm and dry was economical as a warm horse ate less. Large windows ensured good ventilation. The second, third, and fourth floors were for the horses and the upper floors for the milk wagons. The outline of stalls can still be seen in the concrete floors, a material used for ease of cleaning. All edges the horses might brush against were rounded to prevent injury and the ramps leading out of the building as well as the stall floors were scored to improve traction. Some of the ramps still retain remnants of fire hoses laid down to assist the horses in climbing up and down.<sup>xxxviii</sup>

The stable has been re-used as a warehouse for Hudson Moving and Storage, a firm specializing in handling works of fine art and custom-made items. The company has owned it since 1972. Springing from its specialty, some of the floors are now leased to artisans who do fine framing and furniture finishing. The one-story milk depot next door appears to have been demolished or dramatically altered to make way for the automobile service station completed in 1940.<sup>xxxix</sup>

In July of 1920, Sheffield Farms announced that it had purchased a vacant lot to the east of the 125<sup>th</sup> Street plant to enlarge it. In 1934 the company filed alteration plans for two four-story warehouses at an address the *New York Times* gave erroneously as 614-44 W. 126<sup>th</sup> Street, but which was the 125<sup>th</sup> Street property. In comparing 1934 and 1955 insurance maps, it is clear that a four-story addition on the east end of the plant was built during this period. It is apparent when looking at the building that this addition consists of the eastern three bays and explains why the building's cornice appears off-center. A re-configuration of one-story structures at the same time seems to reflect the garages seen today east of this extension. This alteration coincides with the expansion of the New York Central's 130<sup>th</sup> Street Yard.<sup>x1</sup>

Borden was more inclined to use buildings built by others for its Manhattanville facilities. It did replace the frame building it acquired from Clover Farms, perhaps during its post-World War I buying spree, at 618-620 W. 130<sup>th</sup> Street with a brick building in 1934. The company used one of the stables of the former Yuengling Brewery at 470 W. 128<sup>th</sup> Street from at least 1930 to 1935. And it acquired the garage at 646-652 W. 132<sup>nd</sup> Street at the corner of Twelfth Avenue around 1934. It expanded that garage into the lots at 640-644 probably to increase garage space to serve its new plant just up the street. In 1937, the Borden's Farm Products Division announced its acquisition of the six-story garage formerly owned by the Studebaker Corporation at 615 W. 131<sup>st</sup> Street for conversion to a milk pasteurization and distribution plant. It served as a dairy plant for far longer that it was an automobile parts and service center. About the same time, Borden vacated the stables it owned on 129<sup>th</sup> and 130<sup>th</sup> Streets as well as the brewery stable. Presumably with the transition to trucks and the expanded garage at 132<sup>nd</sup> Street the stables were no longer needed.<sup>x1</sup>

## **Boom and Fade-Out**

As the city and the New York Central Railroad progressed with the West Side Improvement, Sheffield Farms announced it would build the world's largest milk depot alongside. In preparation it would begin motorizing its fleet of milk wagons as far north as 100<sup>th</sup> Street, using a leased garage, until the plant was completed. By that time the entire fleet would be converted over to trucks and housed in the new plant. The depot was to fill the entire block from W. 57<sup>th</sup> to 56<sup>th</sup> and Tenth Avenue to Eleventh. It would connect underground to the rail line. In an update on the West Side Improvement on July 4, 1937, the *New York Times* noted the Sheffield Farms depot was under construction.<sup>xlii</sup>

"Milk Horses Are Doomed," the headlines predicted on March 17, 1938, as the first unit of Sheffield Farms new depot neared completion. In May, all horse-drawn wagons on routes below 125<sup>th</sup> Street in Manhattan would be replaced with motor trucks. By the end of that year, the company expected to replace all its horses. The new vehicles were said to be cheaper to operate and much more quiet. The dairy company, and its competitors, had already equipped its wagons with rubber tires and its horses with rubber shoes as a noise-reduction measure. Soon the Sheffield Farms stable in Manhattanville would no longer be needed.<sup>xliii</sup>

The largest milk depot and distribution plant in the world opened on June 5, 1938. It adjoined the company's headquarters at 524 W. 57<sup>th</sup> Street and spanned the underground tracks of the New York Central where insulated tank cars arrived each evening. The plant could process 24,000 to 32,000 quarts per hour. Milk was unloaded into three stainless steel storage tanks, each able to hold 22,000 quarts. The plant featured stainless steel equipment wherever milk touched metal and this was designed to be easily dismantled for sterilization. Pasteurizers were able to raise the temperature of the milk from 40 to 144 degrees F. in fifteen seconds. After being held at this temperature for 30 minutes, it flowed over coolers to reduce it to 38 degrees F. on its way to the three bottling machines which each filled 132 bottles per minute.<sup>xliv</sup>

All delivery equipment for the milk routes formerly served by the three plants at W. 57<sup>th</sup> Street, W. 28<sup>th</sup> Street, and W. 125<sup>th</sup> Street were consolidated at the new distribution plant to reduce costs. All delivery routes below 145<sup>th</sup> Street would be served by motorized trucks from this point. In August 1948, Sheffield Farms still had 200 horses delivering milk in Brooklyn but had trucks on order to replace them. The Borden Co. had retired its last horse in the U.S. the previous month.<sup>xlv</sup>

In just a few years, Sheffield Farms would be shedding its city processing plants in addition to its stables. Columbia University acquired the former pasteurization plant on 125<sup>th</sup> St. in 1949 as part of a \$12,000,000 expansion planned for its Engineering School due to rapid growth in the field. An on-campus site was ruled out as it was estimated that at least three additional buildings would be needed. The Sheffield Farms building was to be remodeled and equipped for use as a laboratory and was to be retained even after the main research building was erected on other nearby lots also purchased at the time at 36-48 St. Clair Place and 556-564 Riverside Drive below the viaduct at the end of Riverside Park. The Sheffield Farms building could be readily adapted for the engineering operations which required steam, water, refrigeration, and sewer drainage and it was. The Heat Transfer Facility was opened in 1950 to test fuel assemblies for nuclear power plants. When it closed in 2003, it was the only laboratory of its kind in the country.<sup>xlvi</sup>

Sheffield Farms sold its enormous depot at 524-556 W. 57<sup>th</sup> St. (517-551 W. 56<sup>th</sup> St. and 806-820 Eleventh Av.) in 1952. The plant consisted of a three-story high basement with an eight-car rail siding and a sub-basement. Eleven truck entrances on 56<sup>th</sup> St. served the building which held two and one-half acres to the floor, comprising over 400,000 square feet. All the floors were connected by ramps. A six-story office structure integral to the depot with 50,000 square feet of office space. The company said it would seek executive office space elsewhere. It was sold to Webb & Knapp which did not announce plans at the time but said the high ceilings, wide column spacing and rail and truck facilities would lend themselves well to another industrial use. It still stands today and has been re-used as broadcast studios for CBS.<sup>xlvii</sup>

The reason for the sale given by a company spokesman was that bottling and pasteurizing operations had been dispersed to plants in the Bronx, Queens, Brooklyn, and Westchester and the plant was already operating at a reduced capacity. The company foresaw greater efficiency and better coordination of facilities by the dispersal to outlying areas. But the

sale probably reflected a rapid decline in home delivery of milk and competition from supermarkets. Milk companies had done nearly 75 percent of their business in home deliveries in the years before, but it had been reduced to 25 percent. These reasons certainly also applied to the Manhattanville facilities.<sup>xlviii</sup>

Borden soon was divesting itself of its New York City properties too. This included moving its corporate headquarters from New York City to Columbus, Ohio in 1969. By the late 1960s, the disappointing performance of the dairy division meant that scores of unprofitable dairy facilities were closed. It is supposed that it was during these cutbacks that the buildings in Manhattanville were disposed of.<sup>xlix</sup>

## Sources

“Borden’s Adopts Rubberized Horseshoes and Pneumatic Tires to Reduce Delivery Noise.” *Milk Plant Monthly* (November, 1933): 68-69.

Brainerd, Charles W. “The Milk Business of the St. Lawrence Division.” *Central Headlight* 36, no. 2 (second quarter, 2006): 19, 24-25.

“Breyers – An American Brand.” [www.uniliver.ca/ourbrands/foods/breyers.asp](http://www.uniliver.ca/ourbrands/foods/breyers.asp).  
Consulted September 15, 2007.

G.W. Bromley & Co. *Atlas of the Entire City of New York: Complete in One Volume*.  
New York: G.W. Bromley & E. Robinson, 1879.

Bromley, George W. and Walter S. *Atlas of the City of New York, Borough of Manhattan*.  
Philadelphia: G.W. Bromley, 1911.

G.W. Bromley & Co. *Atlas of the City of New York, Borough of Manhattan*.  
Philadelphia: G.W. Bromley & Co., 1916.

G.W. Bromley & Co. *Land Book of the Borough of Manhattan*, City of New York. New  
York: G.W. Bromley & Co., 1925.

G.W. Bromley & Co. *Land Book of the Borough of Manhattan*, City of New York. New  
York: G.W. Bromley & Co., 1930.

G.W. Bromley & Co. *Manhattan Land Book*. New York: G.W. Bromley & Co., 1934.

G.W. Bromley & Co. *Manhattan Land Book*. New York: G.W. Bromley & Co., 1955.

Doughty, Geoffrey H. *New York Central Facilities in Color*. Scotch Plains, NJ: Morning  
Sun Books, 2002.

*Guide to New York City Landmarks*, third edition. New York City Landmarks  
Commission, 2004.

Hassett, Albert J. Jr. “The Demise of the West Side Freight Line.” *Central Headlight*  
18, no. 2 (second quarter, 1988):15-29.

Hutchinson, Harry. “Powering Down.” *Mechanical Engineering* 125, no. 4 (April,  
2003):46-48.

*International Directory of Company Histories*, s.v. “Borden, Inc.”

*International Directory of Company Histories*, s.v. “Kraft Foods, Inc.”

"Milk & Cheese." *Time* (March 10, 1930). [www.time.com](http://www.time.com), consulted August 22, 2007.

*Milk Supply of New York: From Dairy to Consumer*. [New York]: Department of Education, New York Museum of Science and Industry, 1933?.

Mohowski, Robert E. *New York, Ontario & Western Railway and the Dairy Industry in Central New York State: Milk Cans, Mixed Trains and Motor Cars*. Laurys Station, PA: Garrigues House, Publishers, 1995.

*The National Cyclopedic of American Biography*. New York: The Press Association Compilers, Inc., 1918-1931.

*National Register of Historic Places Registration Form: Sheffield Farms Stable*, prepared by Tamara Coombs. New York State Historic Preservation Office, 2005.

Nehrich, John. *Rensselaer Model Railroad's Milk Train Data Pack*. [n.p.:n.p.], revised June 1, 1994.

*New York Central West Side Improvement in New York City*. New York Central Lines, 1934. Reprint, New York: West Side Rail Line Development Foundation, Inc., 1984.

New York City. Department of Housing and Buildings. Certificate of Occupancy, No. 26995, November 26, 1940 for 3235 Broadway.

*New York Times*

"Pasteurized Milk in Parks," April 27, 1907.

"\$500,000 Building for Sanitary Milk," July 11, 1909.

"Pure Milk League Formed," October 8, 1910.

"The Real Estate Field: Deal in Manhattanville," August 9, 1913.

"Chatter from Here and There," May 10, 1914.

"Milk Deadlock Seems Broken," October 7, 1916.

"Big West Harlem Sale," July 13, 1920.

"Alteration Plans Filed," February 27, 1934.

"Sheffield's to Build Big Milk Depot Here," October 4, 1935.

"Buys Harlem Garage: Borden Company to Alter Building for Milk Distribution,"  
January 17, 1937.

[no title, map and photos of West Side Improvement], July 4, 1937.

"Milk Horses Are Doomed; Trucks to Replace Them," March 17, 1938.

"\$2,500,000 Depot for Milk Opened," June 5, 1938.

Frank W. Crane, "Street in Harlem Linked to History," November 3, 1940.

"Milk Distributors Fined: Plead Nolo Contendere to Price-Fixing Indictment,"  
August 6, 1943.

"Site is Acquired for Columbia Unit," October 16, 1949.

"Drive for \$12,000,000 Started by Columbia," January 11, 1950.

"Sheffield Sells West Side Plant," May 16, 1952.

Powell, Richard. *The Pioneers Who Stayed at Home*. Sheffield Farms Company, Inc., 1941.

“Road-Rail Units Capture Milk Traffic for N.Y.C.,” *Railway Age*, April 5, 1941, p. 604.

Schaeffer, Morris. “William H. Park (1863-1939): His Laboratory and His Legacy.” *American Journal of Public Health* 75, no. 11 (November, 1985): 1296-1302.

Sheffield Farms-Slawson-Decker Co. *Bulletin* 1, no. 2 (March, 1915).

Sheffield Farms-Slawson-Decker Co. *Bulletin* 1, no.3 (April, 1915).

Sheffield Farms-Slawson-Decker Co. *Bulletin* 1, no. 4 (May, 1915).

Selitzer, Ralph. *The Dairy Industry in America*. New York: Dairy & Ice Cream Field and Books for Industry, 1976.

Washington, Eric K. *Manhattanville & Public Health Timeline*. Typescript, 2007.

Washington, Eric K. *Manhattanville: Old Heart of West Harlem*. Charleston: Arcadia Publishing, 2002.

White, Norval and Elliot Willensky. *AIA Guide to New York City*, fourth edition. Three Rivers Press, 2000.

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## References

<sup>i</sup> Selitzer, p. 32-34.

<sup>ii</sup> Selitzer, p. 34-39.

<sup>iii</sup> Selitzer, p. 38, 125-126; *National Register*, section 8, p. 3.

<sup>iv</sup> Selitzer, p. 132-133.

<sup>v</sup> Selitzer, p. 133-135.

<sup>vi</sup> Selitzer, p. 133-135.

<sup>vii</sup> Selitzer, p. 133-135.

<sup>viii</sup> Selitzer, p. 135; *New York Times*, April 27, 1907.

<sup>ix</sup> Washington, *Timeline*, p. 3-4; *New York Times*, October 8, 1910; *New York Times*, May 10, 1914.

<sup>x</sup> Schaeffer, p. 1297, 1299; Selitzer, p. 156-157, 160-162.

<sup>xi</sup> Sheffield Farms-Slawson-Decker, *Bulletin*, May, 1915.

- <sup>xii</sup> Sheffield Farms-Slawson-Decker, *Bulletin*, May, 1915; Powell, 9-10.
- <sup>xiii</sup> Powell, p. 13-14.
- <sup>xiv</sup> Selitzer, p. 131-2.
- <sup>xv</sup> *National Cyclopedia of American Biography*, s.v. "Horton, Loton;" Powell, p. 11.
- <sup>xvi</sup> *National Cyclopedia of American Biography*, s.v. "Horton, Loton;" "Milk & Cheese," *Time*, March 10, 1930; *International Directory of Company Histories*, s.v. "Kraft Foods, Inc.;" "Breyers – An American Brand," [www.unilever.ca/ourbrands/foods/breyers.asp](http://www.unilever.ca/ourbrands/foods/breyers.asp), consulted September 15, 2007.
- <sup>xvii</sup> *National Cyclopedia of American Biography*, s.v. "Borden, Gail," *International Directory of Company Histories*, s.v. "Borden, Inc."
- <sup>xviii</sup> *International Directory of Company Histories*, s.v. "Borden, Inc."
- <sup>xix</sup> *International Directory of Company Histories*, s.v. "Borden, Inc."
- <sup>xx</sup> *International Directory of Company Histories*, s.v. "Borden, Inc."
- <sup>xxi</sup> Selitzer, p. 20.
- <sup>xxii</sup> Selitzer, p. 38-39; *Encyclopedia of New York State*, s.v. "Dairy Industry."
- <sup>xxiii</sup> Nehrich, p. 3, 30-31; Selitzer, p. 39; *Encyclopedia of New York City*, s.v. "Railroads."
- <sup>xxiv</sup> *Encyclopedia of New York City*, s.v. "Railroads."
- <sup>xxv</sup> *Milk Supply of New York*, p. 1.
- <sup>xxvi</sup> *Milk Supply of New York*, p. 1-2; Brainerd, p. 10.
- <sup>xxvii</sup> *Milk Supply of New York*, p. 2.
- <sup>xxviii</sup> Doughty, p. 92; Hassett, p. 17.
- <sup>xxix</sup> *New York Central West Side Improvement in New York City*, [15], e-mail from Thomas Flagg, railroad historian, August 28, 2007.
- <sup>xxx</sup> *New York Times*, May 16, 1952.
- <sup>xxxi</sup> Mohowski, p. 335; *New York Times*, October 7, 1916.
- <sup>xxxii</sup> *New York Times*, August 6, 1943.
- <sup>xxxiii</sup> Bromley, *Atlas*, Plate 39, 1911; Bromley, *Atlas*, Plate 144, 1916; Bromley, *Land Book*, Plate 144, 1925; *New York Times*, August 9, 1913; *New York Times*, October 7, 1916; *AIA Guide to New York City; Guide to New York City Landmarks*.
- <sup>xxxiv</sup> *New York Times*, July 11, 1909; *Bulletin*, April 1915; Bromley *Atlas*, Plate 39, 1897; Bromley, *Atlas*, Plate 39, 1911..

<sup>xxxv</sup> *New York Times*, July 11, 1909.

<sup>xxxvi</sup> *New York Times*, July 11, 1909.

<sup>xxxvii</sup> *National Register*, Section 8, p. 6-7.

<sup>xxxviii</sup> *National Register*, Section 8, p. 7-8; Bulletin, March 1915.

<sup>xxxix</sup> *National Register*, Section 8, p. 6; NYC Department of Housing and Buildings, Certificate of Occupancy, No. 26995, November 26, 1940.

<sup>xl</sup> *New York Times*, February 27, 1934; Bromley, *Atlas*, Plate 144, 1934; Bromley *Atlas*, Plate 144, 1955.

<sup>xli</sup> *New York Times*, January 17, 1937.

<sup>xlii</sup> *New York Times*, October 4, 1935; *New York Times*, July 4, 1937; *New York Times*, June 5, 1938.

<sup>xliii</sup> *New York Times*, March 17, 1938; *New York Times*, August 9, 1948; "Borden's Adopts Rubberized Horseshoes...."

<sup>xliv</sup> *New York Times*, June 5, 1938.

<sup>xlv</sup> *New York Times*, June 5, 1938; *New York Times*, August 9, 1948.

<sup>xlvi</sup> *New York Times*, October 16, 1949; *New York Times*, January 11, 1950; Hutchinson, p. 46-47.

<sup>xlvii</sup> *New York Times*, May 16, 1952.

<sup>xlviii</sup> *New York Times*, May 16, 1952.

<sup>xlix</sup> *International Directory of Company Histories*, s.v. "Borden, Inc." (updated).