

# A Dairy to EXCEL

by Ken Morrill



Horse Drawn X.L.Dairy Carriage



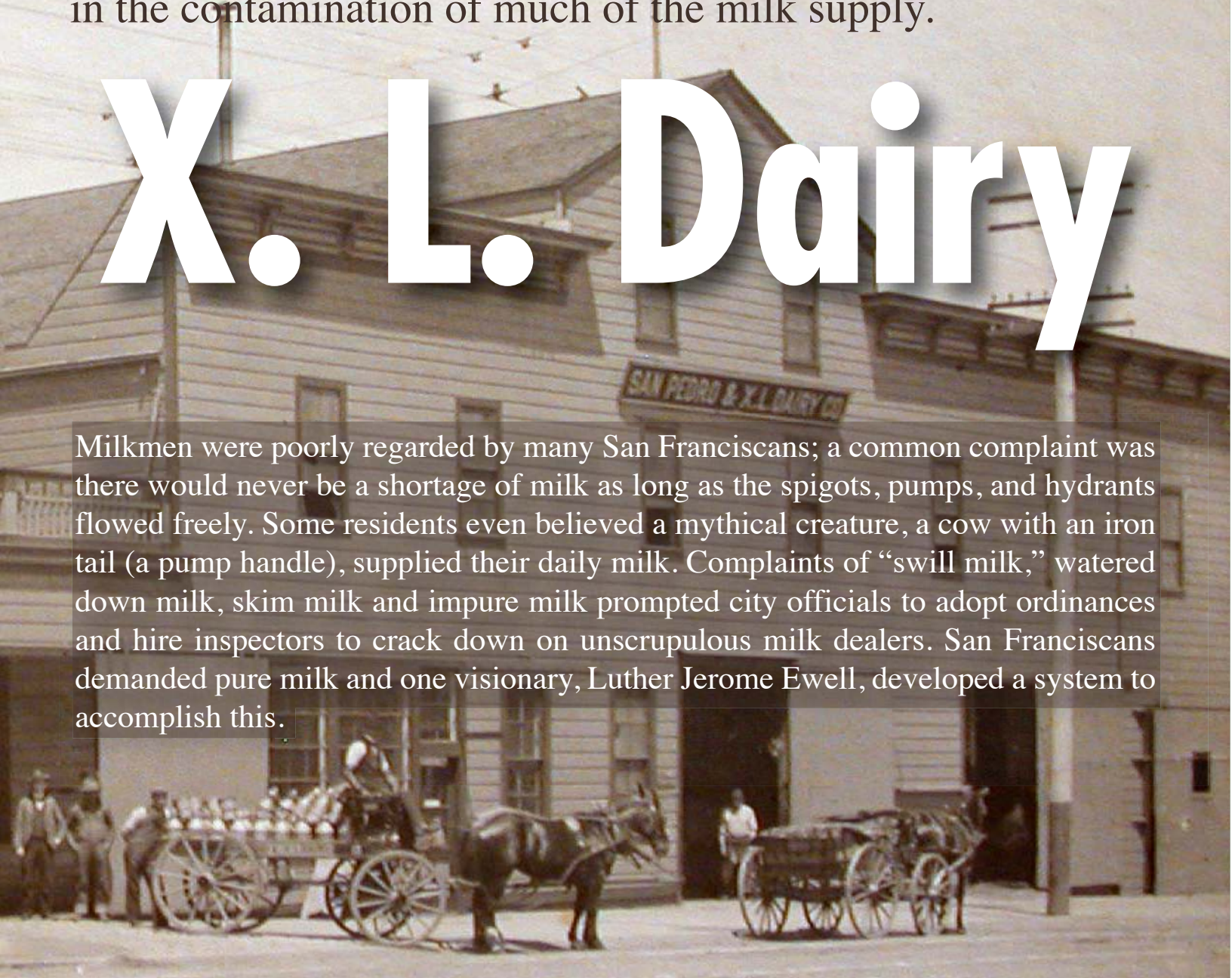
Ewells X.L. Dairy Bottled Milk Co., Depot, 21st & Folsom Streets



Wretched cows standing in mud and manure, without pasture to wander and graze, offered only distillery slops and contaminated water, were conditions often found at dairies that supplied milk to the residents of San Francisco during the latter half of the nineteenth century. Nearly 200 dairies operated within San Francisco and in neighboring counties to fill the demand for milk by the city's residents; however, the unsanitary conditions that prevailed at many of these dairies resulted in the contamination of much of the milk supply.

# X. L. Dairy

Milkmen were poorly regarded by many San Franciscans; a common complaint was there would never be a shortage of milk as long as the spigots, pumps, and hydrants flowed freely. Some residents even believed a mythical creature, a cow with an iron tail (a pump handle), supplied their daily milk. Complaints of "swill milk," watered down milk, skim milk and impure milk prompted city officials to adopt ordinances and hire inspectors to crack down on unscrupulous milk dealers. San Franciscans demanded pure milk and one visionary, Luther Jerome Ewell, developed a system to accomplish this.



San Pedro and X.L Dairy Image above



Becoming a dairyman was the furthest thing from Ewell's mind when he decided to move to California. Four years after gold was discovered in California, at the age of 25, he left the east coast and headed to Panama with his young family. After completing the Isthmus crossing, the family boarded the steamship Nicaragua and headed north to San Francisco for the final leg of their journey, arriving on October 2, 1852.

An enterprising businessman, Luther developed a wholesale produce and fruit business on Sansome Street. Profits from this business allowed him to invest in other businesses including the Daniel Webster Mining Company located in the Coso District of Tulare County. The mining venture failed so Luther invested in several boarding houses. Two boarding houses on Sansome Street were purchased, one he named the Coso House, the other the Branch House, and a third was the Rest for the Weary on Clay Street. The produce business was sold in 1867, but he retained the boarding houses and continued to invest in other ventures, including a loan made to a relative and friend engaged in the dairy business. In 1879, their failure forced Luther to take over the business to secure his loan. In addition to being a hotel keeper, Luther became a dairy owner and milk dealer.

The X.L. Dairy, meaning to "excel," was located along the Old San Bruno Road, just south of San Francisco, in San Mateo County. Extending from the shore in what is now known as Brisbane and up into the hills of the Guadalupe Valley, the dairy encompassed 800 acres. Numerous barns and buildings had been constructed to house the cows, men and equipment at the dairy. An enormous warehouse was conveniently located at the shoreline, enabling schooners to offload and store the

tons of feed needed for hundreds of cows. The milk was transported to, and distributed from, a depot in the city and orders could be left at either the Coso or Branch House.

L.J. Ewell quickly discovered that much of the milk available in San Francisco was unwholesome and that he could build a large and profitable business by supplying pure, rich milk. To achieve this he demanded healthy cows, clean water, quality feed, and scrupulously clean conditions surrounding the highly perishable liquid. He experimented with different breeds of dairy cows and the types of feed. At a time when some of the city dairies were feeding their cows swill, the partially fermented grain that was a waste product of nearby distilleries or breweries, Ewell knew quality milk could only be achieved by using quality feed. After much experimentation Ewell came to the conclusion "that cooked food gave better results than dry," and he insisted "that corn, wheat, Egyptian corn, bran, peas, beans, broomcorn seed, and middlings, in their seasons, in various combinations, cooked to the consistency of mush, with plenty of squash when in season, cut fine and fed green, giving a cow all she can eat twice a day, with plenty of good bur clover hay for a change is the best."

So Ewell devised a system where up to six tons of feed could be cooked utilizing steam. A mixture of feeds was placed in several large tanks and steam, under pressure, was passed through the feed until thoroughly cooked. The feed was allowed to cool before filling the feeding troughs at the milking stations. In addition to this diet, the cows had access to hundreds of acres of good pasture and several sources of clean water.

To prove the soundness of his methods, samples of

**EWELL'S XL DAIRY \* BOTTLED MILK \* COMPANY**  
FURNISHES THE  
**Purest & Best Milk and Cream  
IN THE WORLD.**

→ PRICE ←  
Milk, 10 cts per Quart Bottle.  
Cream, 40c per Quart Bottle.

Main Office, 21st & Folsom Streets,  
**SAN FRANCISCO.**  
Dairy, San Mateo County.  
TELEPHONE 6409. P. O. BOX 1129.



San Francisco, MAY 1 1889.  
No. 234 *McBurnett*  
TO EWELL'S XL DAIRY BOTTLED MILK CO., Dr.  
To Milk from \_\_\_\_\_ to date.  
9 / Quart Bottles, \$ 9.00  
Cream \_\_\_\_\_ Quart Bottles, \$ \_\_\_\_\_  
Bills Rendered, \$ \_\_\_\_\_  
Total, \$ \_\_\_\_\_  
Received Payment for Ewell's XL Dairy Bottled Milk Co.  
Agent *J. Fisher*




milk were taken by two San Francisco chemists, Wm. T. Wenzell and Edwin W. Joy. The test results indicated a high level of fat and solids, convincing Ewell his product was superior to that of other dairies. Confident in these results Ewell adopted the motto "the purest and best in the world."

Once satisfied with his dairy's milk, he began searching for a method to ensure his patrons received it pure. He believed the old system of dipping milk from metal cans and placing it in receptacles supplied by the customer was archaic and should have been condemned. This system allowed unscrupulous deliverymen to water down, adulterate or just simply contaminate the milk with dirt and bacteria every time milk was dipped from the cans. The cans themselves, if old or not thoroughly cleaned, would taint or contaminate the milk.

Ewell's goal to build his business would be achieved by providing the finest quality milk available. To do so he needed a better system for keeping it pure.

During the 1880s, large dairies on the east coast began experimenting with the use of glass containers to bottle their milk. Glass, being impervious and easy to clean, made a superior vessel and once bottled, the milk would be safe from contamination and could not be easily be tampered with. At the dairy, a new and sanitary building would need to be constructed to house the bottling operation. Ewell's vision was to take milk "warm from the cow," seal it in glass bottles and immediately chill it to less than 40 degrees F. Bottling the warm milk ensured that each bottle contained its proportionate share of cream and the milk would not be exposed to further contamination.

It was necessary to wash the bottles thoroughly before filling them and to do so he invented a bottle washing machine. The machine, powered by steam, consisted of a series of revolving pinions and very soft flexible rubber brushes. When inserted into the bottles the revolving brushes would remove all traces of old milk. Each bottle was also washed in a solution of boiling Sal soda and soap, rinsed with clean boiling water, then taken outside and inverted over wooden pegs to dry in the sun. The bottling process was carried out by eight men. After the milkers poured the warm milk into a large strainer it flowed to the bottling machine. This machine, invented by Ewell, allowed two men to fill 16 bottles simultaneously. Next the bottles were sealed by two more men placing manila papers under the caps and springing the lids closed with a flip of the wire bail. The bottles were placed in a bath of ice water to chill for 20 minutes, then transferred to boxes that held 12 bottles and carried to the ice house to await transport to the city. For the cooling process, Ewell purchased an ice machine capable of producing five tons of ice a day. This machine supplied the ice necessary to cool the milk and keep it cold until ready for transport to the city milk depot. Milk was transported twice daily




**EWELL'S**  
**X. L. DAIRY**  
**BOTTLED MILK CO.**

**FURNISHES THE**

**Purest and Best Milk and Cream in the World.**

Newspaper Ad for Ewells X.L.Dairy

**EWELL'S**  
**X. L. DAIRY BOTTLED MILK COMP'Y**



**FURNISHES THE**

**PUREST AND BEST MILK AND CREAM**  
**IN THE WORLD.**

**— PRICES —**

MILK, 10 CENTS PER QUART BOTTLE. . . . .  
CREAM, 40 CENTS PER QUART BOTTLE.  
. . . . . CHARLOTTE Russe Cream, 60 Cts. PER QUART BOTTLE.

**TWO - DELIVERIES - PER - DAY.**

**MAIN OFFICE:**

**21st and FOLSOM STREETS, SAN FRANCISCO,**  
**DAIRY, SAN MATEO COUNTY.**

Telephone 6109. . . . . P. O. Box 1129.  
**L. J. EWELL,**  
2460 FOLSOM STREET.

Early Newspaper Ad for Ewells X.L.Dairy, Purest and Best Milk and Cream



L.J. Ewell & Co.  
X.L. Dairy Depot  
21 st & Folsom Sts.



Complimentary Spoons given out to customers



Ewells X.L. Dairy Bottled  
Milk Co. Depot  
21 st & Folsom Sts.

to San Francisco, following the twice daily milking of the cows. The evening milking needed to be completed by 9 p.m. in order to have the milk bottled, cooled and ready to transport to the city where delivery began at 1 a.m. and would be completed by 7 a.m.

Cream and heavy cream were offered for sale at 40 and 60 cents per quart respectively. These products were produced using a cream separating machine and the remaining skim milk was fed back to the cows. Ewell would not sell skim milk and did not believe in the practice used by other dairies of selling it as such or keeping pigs to dispose of it.

In 1887, Ewell ordered his first shipment of glass bottles. The bottles were produced by the San Francisco and Pacific Glass Works and blown from aqua colored glass. Quart, pint and half-pint size bottles were purchased. The earliest bottles were produced with an applied lip and later bottles were made with a tooled lip. Quart and pint bottles were used for milk, while cream was bottled in the half-pints or larger bottles. Because aqua colored glass would have imparted a very sickly appearance to the milk it is likely few of the aqua bottles were made. All subsequent bottles were made from clear, flint glass.

Because the bottles were to be returned and reused, ownership was established by having the words "L.J. EWELL & CO. X.L. DAIRY DEPOT 21st & FOLSOM STS.", and on the reverse, "THIS BOTTLE MUST BE RETURNED" blown into the glass.

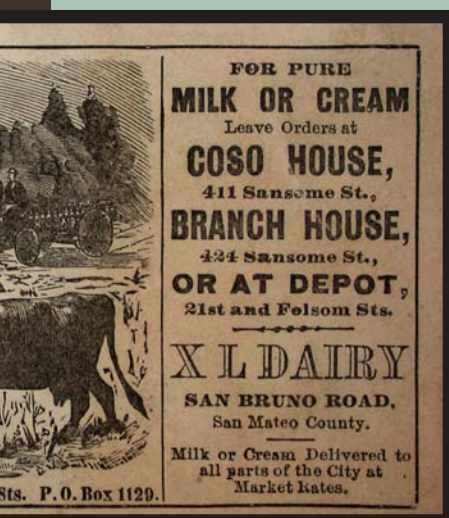
For many years, Ewell's customers had received their milk, dipped from metal cans, in the same manner all other milk dealers offered. To set his business apart Ewell had several thousand silver spoons made to entice his customers to switch to the bottled milk. These ladle shaped spoons were used to extract the cream that, after rising to the top of the milk, filled the neck of the bottle. The first spoons made were inscribed "COMP'S. OF X.L. DAIRY."

The system of bottling milk was new to San Francisco and Ewell wanted to capitalize on the idea so he decided to rename and incorporate the business. A new name was adopted in 1888 and the business became known as Ewell's X.L. Dairy Bottled Milk Co. Incorporation was achieved in July of that year with L.J. Ewell as president and director along with directors Edward A. Anthony, J.C. Moorman, Orrin F. Chamberlain and Florian Andrea. New bottles were made embossed; "EWELL'S X.L. DAIRY BOTTLED MILK CO. DEPOT 21st & FOLSOM STREETS." and on the reverse "THIS BOTTLE MUST BE RETURNED". New cream spoons were also manufactured with the inscription; "COMPTS E XLD B M Co."



Front of 1890s Trade Card





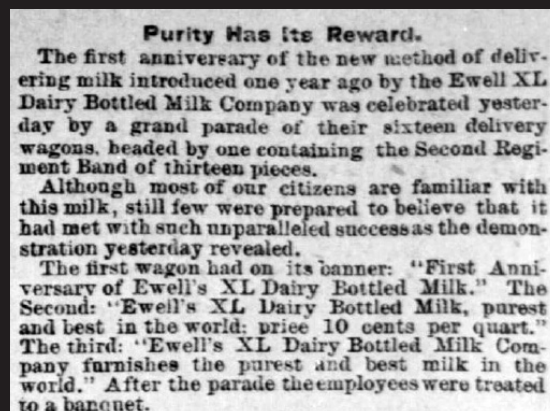
The bottled milk idea quickly gained favor with San Francisco's residents and on November 5th 1888, Ewell celebrated his first anniversary for the newly named company. A grand parade was held, including the Second Regiment Band accompanied by 16 delivery wagons with banners proclaiming: "First Anniversary of Ewell's X.L.Dairy Bottled Milk" and "Ewell's X.L.Dairy Bottled Milk, purest and best in the world; price 10 cents per quart."

However, the bottled milk idea was not popular with everyone in San Francisco. In February of 1889, several X.L. Dairy deliverymen were confronted by men believed to have been employees of competing milk dealers. Evidently the success of the bottled milk was cutting into the business of the other milkmen and they thought they could discourage Ewell's drivers by harassing them. Ewell's deliverymen were stopped on several occasions and one time the police were summoned after a driver was beaten over the head with a heavy cane and numerous boxes of bottled milk were stolen.

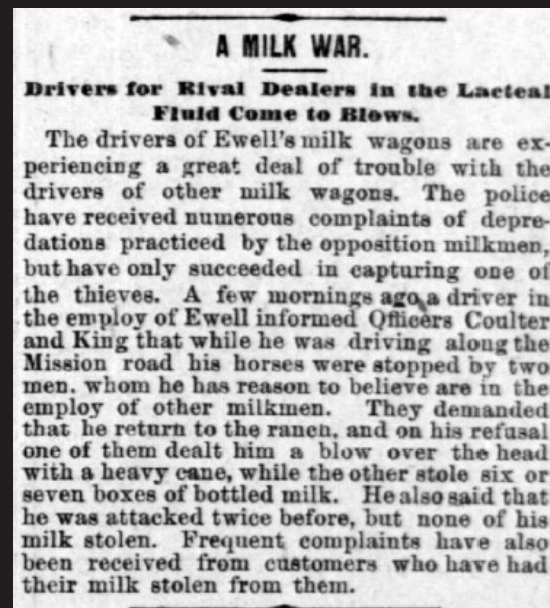
The bottled milk business quickly grew to 5,000 bottles delivered each day. It was necessary for Ewell to have three or four times that many bottles on hand as no more than one third would be in use at one time. Because the bottles were reused they had to be strong enough to withstand repeated washing, drying, filling, deliveries and customer handling. Eventually, the bottles became unusable but some may have lasted many months or more before being retired and sold for scrap glass. One of the unintended consequences of this reuse was the glass of many of the bottles may have acquired a purple tint due to their repeated exposure to sunlight. Because manganese was added to the glass during their production, and manganese oxidizes upon exposure to ultraviolet light, the act of setting the bottles outside to dry would have caused them to eventually "sun color."

Ewell utilized many forms of advertising to promote his business. Ads were placed in the San Francisco City Directory and San Francisco newspapers, and trade cards and cookbooks were printed to be given to his patrons. In March and September of 1890, two editions of a cookbook, totaling 50,000 copies, were printed for Ewell. The books were given to San Francisco residents to promote X.L. Dairy Bottled Milk. Recipes using his bottled milk, information about the history of the business, methods used in his operation, advantages of his bottled milk as well as advertisements for other San Francisco merchants were all included in this free book.

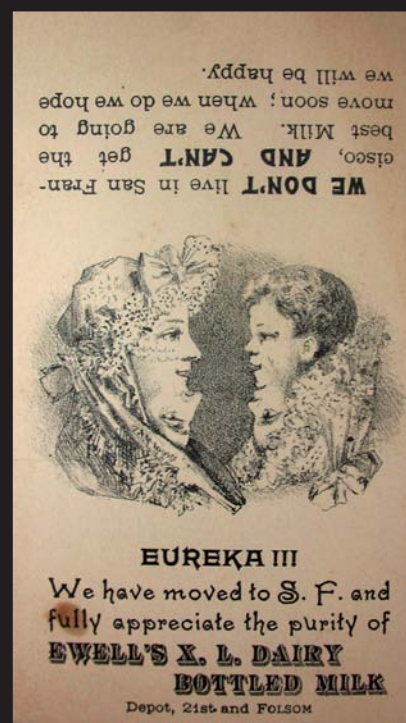
On the 24th of March 1891, Ewell filed for a trademark to protect the business name he had been using since 1888.



Nov. 6 1888 Newspaper Ad



Feb 25th 1889 Newspaper Ad



Back of 1890s Trade Card

The name "Ewell's X.L." and the words "Dairy Bottled Milk Company" were to be his trademark, "to be used in conjunction with milk and cream, particularly that contained in bottles." On the 4th of August 1892, his trademark was granted and the words "trade mark" would be embossed on all subsequent bottles. An act approved by the state legislature in 1891 also made it illegal for anyone but the owner of these embossed bottles to use them in their business.

The bottled milk business continued to grow. By the fall of 1892, many of Ewell's employees felt they owned enough stock in the company and did not want to receive any more stock in lieu of wages. When the business had been incorporated, in 1888, six thousand shares of stock were issued with a total capital of \$150,000. Employees had been encouraged to invest in the company with the promise of receiving dividends of one percent per month. Shares were issued at a value of \$25; therefore a dividend of 25 cents was to be paid each month for each outstanding share. Ewell held most of the stock and seemed to use it in peculiar ways, as many of the employees would discover.

In early October of 1892, the majority of Ewell's men went on strike. Tensions ran high prompting Ewell to summon an officer from the police station to help maintain the peace, however, other than a demand from the employees for an accounting of the books, no threats against Ewell were made. The men had suspected for some time that something was amiss about the way Ewell operated the business and they learned dividends were being paid through the sale of stock that he owned. When the men demanded reimbursement for shares they owned, Ewell claimed the stock was only worth half of what they had invested. Nine or ten of Ewell's employees filed suit to recover monies totaling more than \$5,000.

Over the next year the state of affairs of Ewell's dairy business began to emerge. In 1893, Ewell owned 5,514 shares of stock out of a total of 6,000 in the company where he had been president since its incorporation in 1888. Since incorporating he had used these shares as he pleased and upon a thorough accounting a number of alleged illegal acts were discovered. Stock was often used, as well as notes issued from Ewell's private account, to settle bills owed by the company. Ewell maintained that his problems were due to "dummies" working for the company. He

pleaded ignorance about the account books, claiming "I am willing to confess that the books of the company were in a bad condition while I had charge of them, but the fact is due solely to my unfamiliarity with the work."

Ewell's trouble at the dairy steadily increased and it is likely that he had to sell his boarding houses to help resolve the financial problems associated with the dairy business.

In January of 1895, Ewell severed his interest with the company and the former vice president, Jean L. Vermeil, became the new president. Shortly thereafter, Mr. Vermeil filed to change the corporate name from "Ewell's X.L. Dairy Bottled Milk Co." to the "X.L. Dairy Co." The change was approved on November 22, 1895. The change in business name meant that new milk bottles would have to be purchased and the old bottles destroyed. The bottles produced for Mr. Vermeil were embossed; "X.L. DAIRY CO. DEPOT 21st & FOLSOM STS. SAN FRANCISCO TRADE MARK" and on the reverse "THIS BOTTLE MUST BE RETURNED."

Ewell did not retire from the dairy business but instead purchased a half interest in another milk company. He and Frank E. Shafer, a former plaintiff in the lawsuit against Ewell, became partners and owners of the California Milk Company. The business was incorporated as "Ewell, Shafer and Co." This dairy was also located in San Mateo County and the milk depot was at 331 23rd Avenue. Bottles produced for this company were embossed "CALIFORNIA MILK CO. L.J. EWELL'S BOTTLED MILK DEPOT 23d & FOLSOM STS. S.F." and on the reverse "THIS BOTTLE TO BE WASHED AND RETURNED NOT TO



**X.L. Dairy Co. Depot  
21st & Folsom Sts. San  
Francisco Trade Mark**



**California Milk Co. L.J.  
Ewell's Bottled Milk  
Depot 23d & Folsom  
Sts. S.F**



**San Pedro & X.L. Dairy Co.  
Depot 21st & Folsom Sts.  
San Francisco Trade Mark**





Several different, Ewells X.L. Dairy Bottled Milk Co. Depot, 21 St & Folsom Sts.



Two different, California Milk Co., L.J. Ewells Bottled Milk Depot, 23 St & Folsom Sts.

BE SOLD OR TRADED.” Ewell remained president of the California Milk Company until his death on August 11th 1898.

The cows of the X.L. Dairy, the progeny of Ewell’s herd, carried on their lives in the Guadeloupe Valley and Mr. Vermeil, as president, continued to sell and deliver bottled milk from the 21st & Folsom street depot. During these years, competition made it difficult for dairy operations to compete in this rapidly evolving business. Stringent new regulations and their enforcement by city officials forced many dairies to purchase equipment and adopt sanitary practices that would protect their milk from contamination and ensure that it arrived at their customer’s doorstep pure and unadulterated. For these reasons many small dairies were absorbed by larger concerns or merged to generate the capital needed for these improvements.

In 1899, the X.L. Dairy and the San Pedro Farm merged to form the San Pedro & X.L. Dairy Company. Milk from the new company was originally distributed from the depot at 21st & Folsom Sts. and the bottles used were embossed; “SAN PEDRO & X.L. DAIRY CO. DEPOT 21st & FOLSOM STS. SAN FRANCISCO TRADE MARK” and with or without “THIS BOTTLE MUST BE RETURNED” on the reverse. In 1901, the depot was moved to the former San Pedro Farm depot location, at 1515 California Street, and new bottles were produced embossed with this address.

The great earthquake and fire that devastated much of San Francisco in 1906 created chaos for the city’s milk dealers. Even those not damaged by the earthquake or fire lost most of their customers. Some of the milk dealers decided to share equipment, supplies and

personnel to provide free milk to the thousands of now homeless residents. This cooperation was so successful that eight companies, including the San Pedro & X.L. Dairy Co., merged and formed the Dairy Delivery Company. With this merger came the abandonment of the tin top milk bottle in favor of the modern milk bottle that was sealed with a paper cap.

Many generations of X.L. Dairy cows had grazed the slopes of the Guadeloupe Valley over three decades, happy but without knowledge of the important role Luther J. Ewell had played in leading the dairy industry into the 21st century. His use of bottles to keep milk pure was eventually adopted by every dairy. Today’s milk bottle collectors, who probably had a milkman deliver bottled milk to their doorstep, are thankful for the bottles that were never returned to those dairies.



Three different, San Pedro & X.L. Dairy Co. Depot, 23 St & Folsom Sts. San Francisco