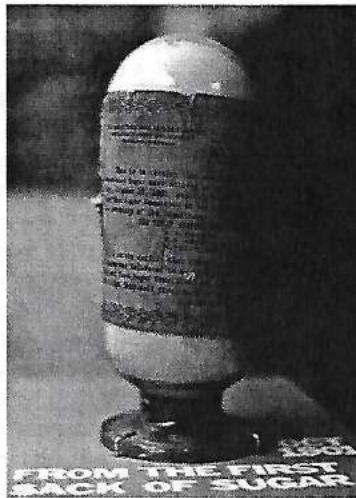
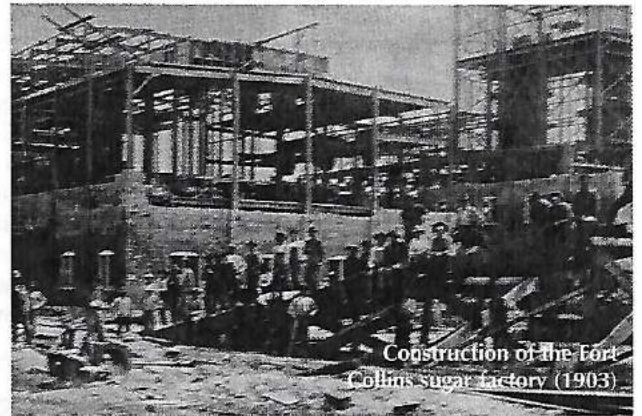


## History



One of 100 bottles of sugar auctioned off to raise money to construct the Loveland sugar factory

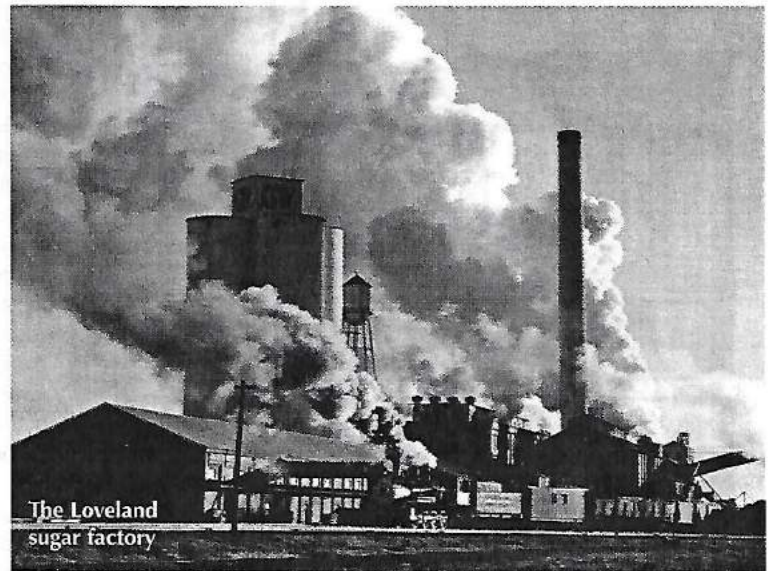


Construction of the Fort Collins sugar factory (1903)

# the sugar beet industry

Colorado's White Gold

by Kenneth Jessen

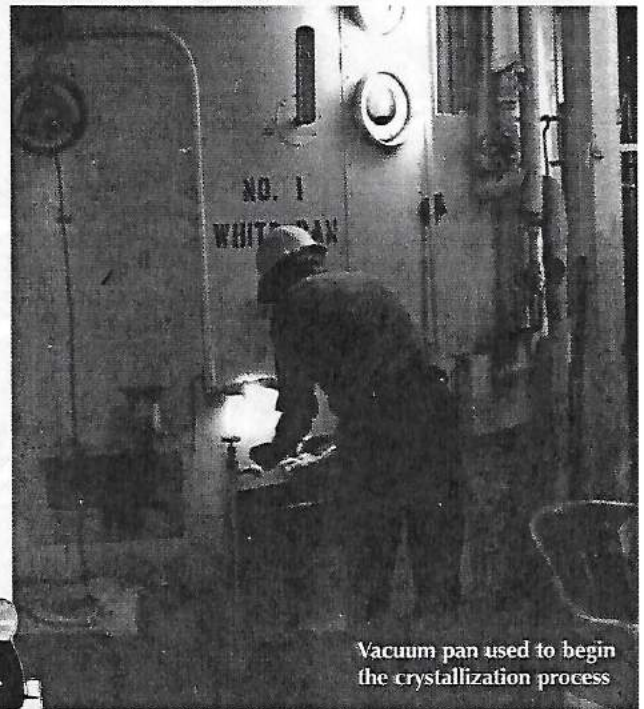


The Loveland sugar factory

Precious metal mining was declining during the early part of the 20th century. Colorado needed new industry to sustain its economic growth. The new enterprise turned out to be a vast sugar beet industry where pure, white granular sugar became Colorado's white gold.

Great Western Sugar Company dominated development and rapidly became northern Colorado's largest industry. It changed family farming into large-scale industrial farming. New machinery was developed to plant the beet seeds, thin, cultivate, and harvest mature beets. The sugar industry brought ethnic diversity in the form of German speaking Russians to act as field hands. Large sugar factories were constructed in Fort Collins, Loveland, Windsor, Greeley, Eaton, Fort Morgan, Sterling, Brighton, Longmont and Johnstown. The sugar industry required vast amounts of raw material. Limestone quarries opened as coal mining increased to meet demand.

After the passage of more than half a century, tariffs on cane sugar were lifted. Aging factories became less efficient, and the sugar industry started to decline. The Fort Collins factory was closed.



Vacuum pan used to begin the crystallization process



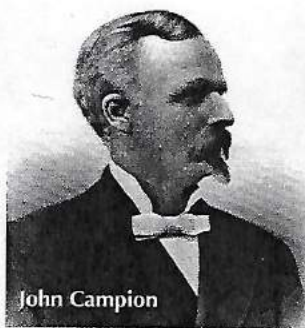
A "dinky" owned by the Great Western Sugar Company

Lydia's *STYLE* Magazine



WATCH A "COLORADO EXPERIENCE" VIDEO ON THE BOETCHER FAMILY:

<http://video.rmpbs.org/video/2365005651/>



John Campion



Charles Boettcher

in 1960 followed by Windsor in 1967, Eaton and Brighton in 1976, Johnstown and Longmont in 1977 and Loveland in 1985.

The extraction of sugar from a beet is relatively new in terms of human history. The first sucrose was obtained in 1747 by Berlin professor Andreas Marggrat. One of his students, Franz Carl Achard, worked on improving sugar content. In 1801, this attracted the attention of the King of Prussia. Funds were provided to Achard to build the first sugar factory in Czechoslovakia. During the Napoleonic Wars in the early part of the nineteenth century, Britain retaliated against France by cutting off France's supply of cane sugar. This forced the French to turn to sugar beets as their source of sugar since climatic conditions did not favor sugar cane. France put over 150 small sugar factories into operation, but after Napoleon's defeat at Waterloo in 1815, the industry declined. Cane sugar was a lot cheaper and far less costly to produce.

The first sugar factory in the United States was constructed in San Francisco. In 1890, Henry Oxnard erected factories in Nebraska and Utah to realize the crop's potential.

The Spanish-speaking people, who settled the southern part of Colorado, can be credited with growing the state's first sugar beets in 1841, long before Colorado became a territory. Limited cultivation took place on the Maxwell land grant in what is now Las Animas County.

Colorado's champion of a state-wide beet sugar

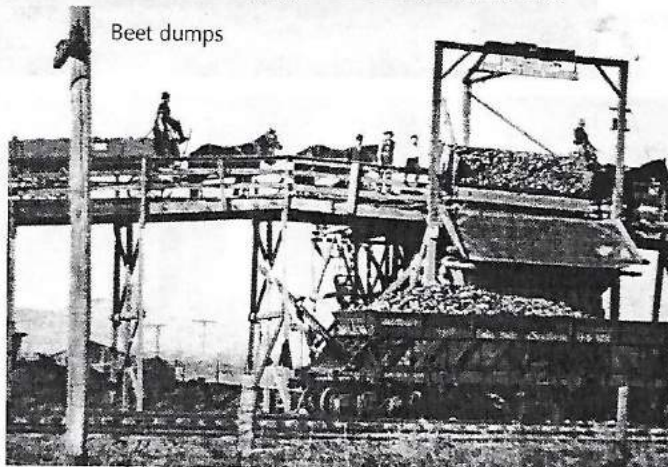
industry was William N. Byers. He was the editor and founder of the *Rocky Mountain News* and in 1866, ran an article about the industry's potential. Swedish-born Peter Magnes, a Platte Valley farmer, began experimentation with sugar beets. He obtained high sugar content from his beets and used the crop as animal fodder. He was first to calculate the potential economic yield in dollars per acre and arrived at a figure higher than for any other Colorado crop grown. Magnes was soon joined by Clear Creek farmer L. K. Perrin in experimentation.

German-trained Professor Jacob F. L. Schrimmer, a metallurgist and assayer, bought science to the sugar beets grown by Magnes and Perrin. Having failed at his bid to find gold in Colorado, Schrimmer turned his attention to uncovering the non-mineral resources of the state. Schrimmer held the prominent position of supervisor of the Denver Mint and using the mint's laboratory, helped the two farmers improve their sugar content. In December 1869, Byers willingly published an article by Schrimmer in the *Rocky Mountain News*. Schrimmer mentioned the ideal growing conditions along the Cache la Poudre and Big Thompson river drainages. He predicted that Colorado could become the nation's largest sugar producer. This led the Colorado legislature to attempt to pass several bills offering subsidies to the first company to build a sugar factory. In the meantime, Byers joined Schrimmer, Magnes and Perrin to raise \$30,000 toward the construction of a factory. This was far too little, but it stimulated thinking among investors.

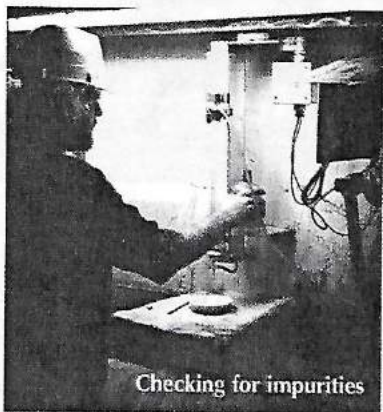
In 1879, Colorado Agricultural College in Fort Collins (now Colorado State University) became the first educational institution to begin methodical experimentation with sugar beets. A world record for sugar content and purity was achieved at an experimental plot in Fort Collins.

The state's first sugar factory was not built along the Front Range, however. A Grand Valley farmer named Henry Rhone got the Oxnard factory in Grand Island, Nebraska, to ship him some seed. He planted the seed between his rows of peach trees and had the mature beets analyzed at the Grand Island factory. The results were very encouraging. What also helped the beet sugar industry was a tariff imposed by the United States Congress in 1896 on imported cane sugar.

In the early part of 1893, a Grand Junction pharmacist, Charles Mitchell, went before the local county board to request a



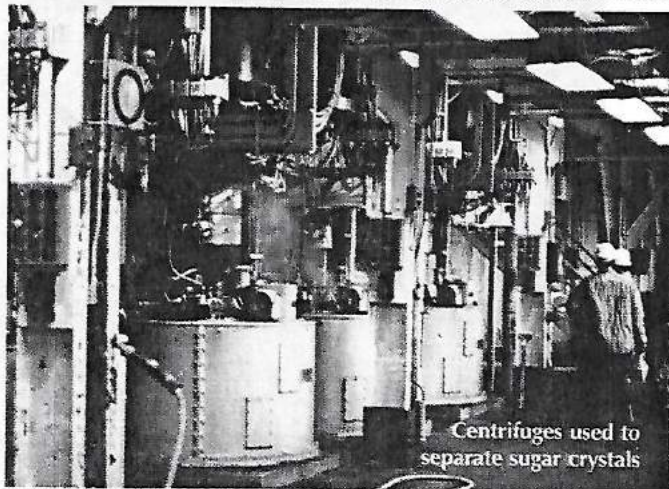
Beet dumps



Checking for impurities

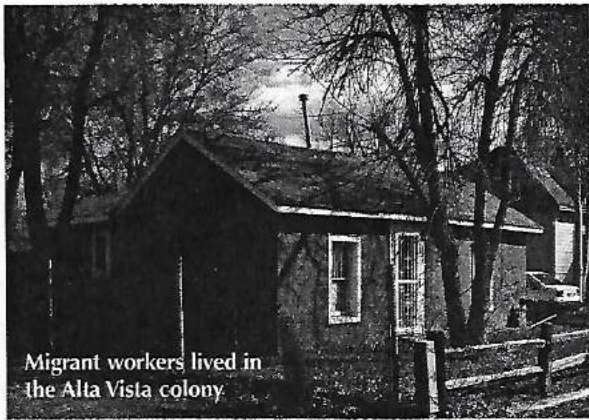


Loveland "dinky"



Centrifuges used to separate sugar crystals





Migrant workers lived in the Alta Vista colony.

"bounty" of \$2 per ton to be given sugar beet growers. The bounty was rejected, but the Denver & Rio Grande Western Railroad stepped forward and offered to transport experimental beets to a factory in Utah for processing.

A representative from Grand Junction was sent to meet with John F. Campion of the Denver Chamber of Commerce to help raise the necessary capital. After the meeting, Campion met with his business partner, Charles Boettcher. The two men imported beet seed from Germany to get Grand Valley farmers started. Boettcher, incidentally, once operated a hardware store in downtown Fort Collins. The harvested beets were sent to a sugar factory in Utah for analysis, and the sugar content was higher than any beets raised in Utah.

In January 1899, Boettcher, Campion and others formed the Colorado Sugar Manufacturing Company and work began on a three-story factory made of three million bricks. It covered an area greater than a football field and exceeded other factories in Utah in size and capacity.

The first sugar beets were processed in November 1899. Owners expected a harvest of 40,000 tons, the amount necessary to make the factory profitable. Lack of field hands, poor planting techniques and a wet spring produced only 10,000 tons. Inexperienced factory operators compounded the problems. The plant manager and superintendent were fired, but the next season was also a failure. After several owners, Holly Sugar purchased the Grand Junction plant and operated it until 1931.

The next sugar factories were constructed in 1900 at Sugar City and Rocky Ford east of Pueblo. These factories were byproducts of a land promotion scheme. Eastern investors, who had backed two

irrigation projects a decade earlier, became owners of a great deal of land in southeastern Colorado. The investors needed something to stimulate farmers, and growing sugar beets was the answer.

As the turn-of-the-century approached, the town of Loveland consisted of just 2,000 citizens. Although Loveland had a sawmill, flourmill and creamery, substantial industry was lacking

in its economy. Loveland business leaders were well aware of the rapid development of the beet sugar industry, and in March 1898, a meeting was called in the Opera House at Fourth Street and Cleveland. The purpose of the meeting was to discuss how to encourage this new industry. A committee, consisting of many of the town's business leaders, was formed. Local merchants endorsed these efforts by donating prizes for the best locally raised sugar beets.

The scheme worked. Loveland was courted by various investors as the potential site for a sugar factory. The manager of the Grand Junction plant came to Loveland in March 1900, promising an operating factory in eight months. Other offers followed that summer, but it wasn't until October that things began to happen.

Campion, Boettcher and other Denver businessmen envisioned north-central Colorado as the ideal location for an extensive sugar industry. The Agricultural College had shown it was possible to obtain high yields. These same investors who had experience in Grand Junction, became seriously interested in Loveland. They offered Loveland a firm proposition backed by a \$50,000 dollar bond deposited in a local bank. The terms of their offer called for Loveland to pay them \$8,000, give them 5,000 acres of land for the factory, and furnish contracts for at least 3,500 acres planted in sugar beets. For a small community the terms seemed impossible to meet.

The Loveland sugar beet committee had

worked 2 years to try to seal a deal for the local factory. Every town in Northern Colorado was now in competition for a factory, and should Loveland fail, other Northern Colorado towns would gobble up the offer.

When the time given to meet the conditions of the offer expired, sufficient acreage had been contracted and the land upon which to build the factory was secured. The committee, however, was a long way from getting the balance of the cash bonus. Boettcher extended the deadline and promised to construct a plant having daily capacity of 1,000 tons, almost triple that of his original proposal.

An imaginative auction was held to raise the money. Boettcher and his associates agreed to turn over the first 100-pound sack of sugar produced by the Loveland plant so that it could be divided into one pound lots and given to the highest 100 bidders.

On December 4, 1900, the first 100-pound sack was auctioned off. The highest bidder paid \$325 while the second-highest bid was \$300. The mayor of Loveland gave \$14 to weigh the first sack. The sack itself went for \$5 for the inner lining and \$2 for the outer lining. The draw string went for 50 cents and in all \$3,286 was brought in by the auction, enough to reach the required \$8,000.

Boettcher was telephoned with the good news. By that time, beet contracts totaled more than 6,000 acres, and the tonnage harvested would tax the Loveland sugar factory during its first campaign. In fact, the amount of sugar produced at Loveland exceeded the combined output of both the Rocky Ford and Sugar City plants.

It was time for a little humor. The Loveland Reporter ran the following article, "Proud but not Stuck Up ... Pure Air, Pure



Restoration of sugar factory into office space in Fort Collins



Water, Sunshine and a new beet sugar factory will keep Loveland on the map for years to come. We will expand in time and gradually absorb Berthoud and Fort Collins while we're in the benevolent assimilation mood."

Construction of Great Western's first sugar factory in Loveland began in February 1901. Many of the original buildings were standing until 1990 when the dismantling process began. Only the office building remains today.

At one time, there were enormous wooden sheds on the north side of the factory to unload beet-filled railroad cars. The sheds covered nearly a quarter of a million square feet and included six parallel railroad tracks. Entire trains could be unloaded free from winter weather. Concrete flumes filled with fast-moving water carried the beets into the factory. The cars had to be emptied by laborers shoveling out the beets. To save costs, the sheds were torn down in favor of a high line where beets were dumped directly from railroad cars into the flumes. In cars waiting to be emptied, the beets would freeze into one solid mass. This led to the use of a wet hopper where boiling hot water thawed and flushed the beets out of the cars.

November 21, 1901, was Loveland's Beet Sugar Day to celebrate the opening of the new plant. Some 3,000 visitors poured onto the property for a close look at how sugar was made. By then, 42,000 tons of beets had been harvested and piled outside the factory ready for processing.

Excursion trains brought people from Greeley and Denver for this celebration. Souvenir bags of pure granular sugar were passed out so that each visitor would have a sample of Colorado's new white gold. The pungent smell of success permeated the air. Great Western officials announced cash prizes of \$1,000 for the best yields from 5, 10 and 15-acre tracts.

The Loveland sugar factory was the fourth of its kind built in Colorado, the first built under the Great Western name, and the first built in the northern part of the state.

Fort Collins' interest in a sugar factory probably came from the sugar beet experiments at the Colorado Agricultural College. An article in *Field and Farm Journal* extolled the record breaking sugar content from locally grown sugar beets.

In 1891, the Oxnard Sugar Company of

California proposed that they build a Fort Collins factory. They wanted area farmers to commit to 5,000 acres in sugar beets. This was easily met, however, Oxnard also demanded a \$150,000 cash bonus and free land for the factory. Fort Collins turned down the offer, but with factories being constructed in Loveland, Eaton and Greeley, intense interest continued.

Business leaders James B. Arthur and Peter Anderson were empowered to seek proposals and sign a contract for the construction of a factory. They toured factories in Michigan and even met with sugar mogul Henry Havemeyer of the American Sugar Refining Company. He pledged one third of the money needed.

In August 1903, the Fort Collins Sugar Manufacturing Company was incorporated. It was later reorganized as the Fort Collins Colorado Sugar Company. Chester S. Morey became the company's president and Charles Boettcher vice-president. Contracts were let, and brick manufacturer James J. Cook built a kiln in Soldier Canyon for the three million bricks required for the factory and warehouses.

The beets were harvested in the fall of 1903, but delays in getting material postponed the factory's opening until January 1904. As the 150-foot smokestack rose into the sky north of Fort Collins residents saw the dawn of a new era in manufacturing. The first mud-covered beets entered the factory on January 4, and the entire 1903 crop was successfully processed.

Established as a separate company, the Great Western Railway provided transportation for the freshly harvested sugar beets to the factories. This service concentrated on factories lacking existing rail service. The railroad served beet dumps in the Cache la Poudre, Big and Little and St. Vrain river drainages. Farmers brought in their beet-filled wagons to the dumps to be weighed and unloaded. Time was critical since once a beet was harvested, its sugar content began to decline with each passing day.

To provide field and factory labor, entire villages of German-speaking Russians immigrated to the area. They wished to retain their customs, language and culture. Colonies were established on the north side of the Cache la Poudre near the factory. This included Buckingham Place, Andersonville and Alta Vista. Local residents helped with the construction of churches while store owners catered to the tastes of the new

immigrants. With the passage of time, the Germans from Russia became landowners and merchants.

Professor Jacob F. L. Schrimmer's prediction came true. In 1905, Colorado became the leading producer of beet sugar in the U.S. surpassing Michigan and California. The separate holdings in various independent factories were consolidated under the Great Western Sugar Company name.

At one time 22 sugar factories operated in the state. Once the tariffs that protected the beet sugar industry expired, the output of refined sugar from Colorado declined. In our area, only the Greeley and Fort Morgan factories remain in operation, and it is only a matter of time until this great agricultural-based industry is a thing of the past in Colorado. ¶

---

*Kenneth Jessen is a freelance writer and historian Living in Loveland. He would like to thank Candy Hamilton, author of Footprints in Sugar: The Great Western Sugar Company.*

---

## Great Western Railway

The **Great Western Railway of Colorado** (reporting mark **GWR**) operates about 80 miles (129 km) of track in Colorado and interchanges with the Union Pacific Railroad as well as the BNSF Railway. It is a currently a subsidiary of OmniTRAX but was founded in 1901 to serve the Great Western Sugar Company and other sugar, beet, and molasses companies in Colorado. It also operated passenger services from 1917 to 1926. Their route consists of a line from Loveland to Johnstown, Colorado, where it splits to Miliken and Longmont. Going north out of Kelim is Windsor where once again the line splits to go to their industrial park and Greeley, or Fort Collins. It has since expanded service to include customers such as Anheuser-Busch, Eastman Kodak and Simplot.

[https://en.wikipedia.org/wiki/Great\\_Western\\_Railway\\_of\\_Colorado](https://en.wikipedia.org/wiki/Great_Western_Railway_of_Colorado)