

## LOOKING FOR A BETTER WAY

of the Mueller Company

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AS A GERMAN IMMIGRANT WITH A PASSION FOR CRAFTSMANSHIP,
Hieronymus Mueller established a one-room machine shop in 1857
on the south side of the 100 block of Decatur's W. Main Street. It was
the humble site of a company whose name now represents more
than 12 manufacturing locations across the United States and
Canada with 3,000 employees making countless thousands of
products for markets worldwide. Mueller's philosophy of "always
looking for a better way" to do things would propel the company
to the forefront of American industry.

German immigrant wir for craftsmanship, Mueller established a rachine shop on the s HIERONYMUS MUELLER **1857** Hieronymous Mueller opens machine shop in 100 W. Main



1857-59 Relocation to larger space in 100 N. Water

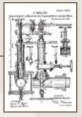


**1859** Moves to larger site in 200 E. Main



**1870** Mueller becomes city tapper

**1872** Patent granted for tapping machine for water, gas lines



**1885** Gun making, sporting goods move to 138 Merchant



**1887** Plumbing business moves to 249 E. Main

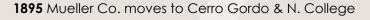


**1891** 3-story Mueller Block built at 257 N. Main



**1892** Guns, sporting goods move to 134 Prairie

**1893** H. Mueller Manufacturing Co. incorporated





1895 Mueller car in first U.S. auto race



Hieronymous Mueller dies of injuries suffered while experimenting on a carburator 1900

Company buys 72 acres on Lake Decatur for Muellerville Village 1912

Brass products factory built in Sarnia, Ontario 1912



Detonator fuses for 75 mm shells made for WWI 1917

Mueller Brass sold to a Mueller son 1927



Mueller buys Columbian Iron Works of Chattanooga 1933



Mueller introduces first O-ring gas meter valve 1949

Brass foundry moves to Garfield & Jasper 1953



\$12 million investment modernizes Decatur factory 1993

New parent company — Mueller Water Products, Inc. 2006

# Lection 1

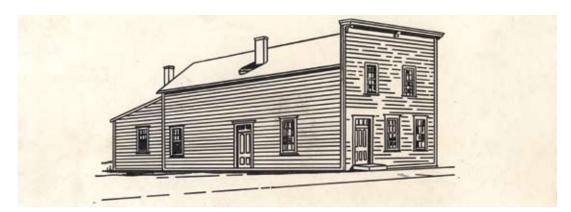
## Rumblings of Genius

#### A PASSION FOR CRAFTSMANSHIP

As the Mueller Company celebrates its 150th year of business, the company name has become synonymous with well-designed, quality products. The people of Decatur built that reputation predominantly, with their handiwork now in brass valves and equipment across the globe.

In contrast to its size today with nearly 3,000 employees across North America and over 700 of those based in Decatur, Mueller began humbly enough in 1857. Hieronymus Mueller, a German immigrant with a passion for craftsmanship, set up a one-room machine shop on the south side of the 100 block of Decatur's W. Main Street. Settling in Decatur because of its location at a junction of two railroads, he found a growing city suited for his business of handmade guns and the repair of anything mechanical.

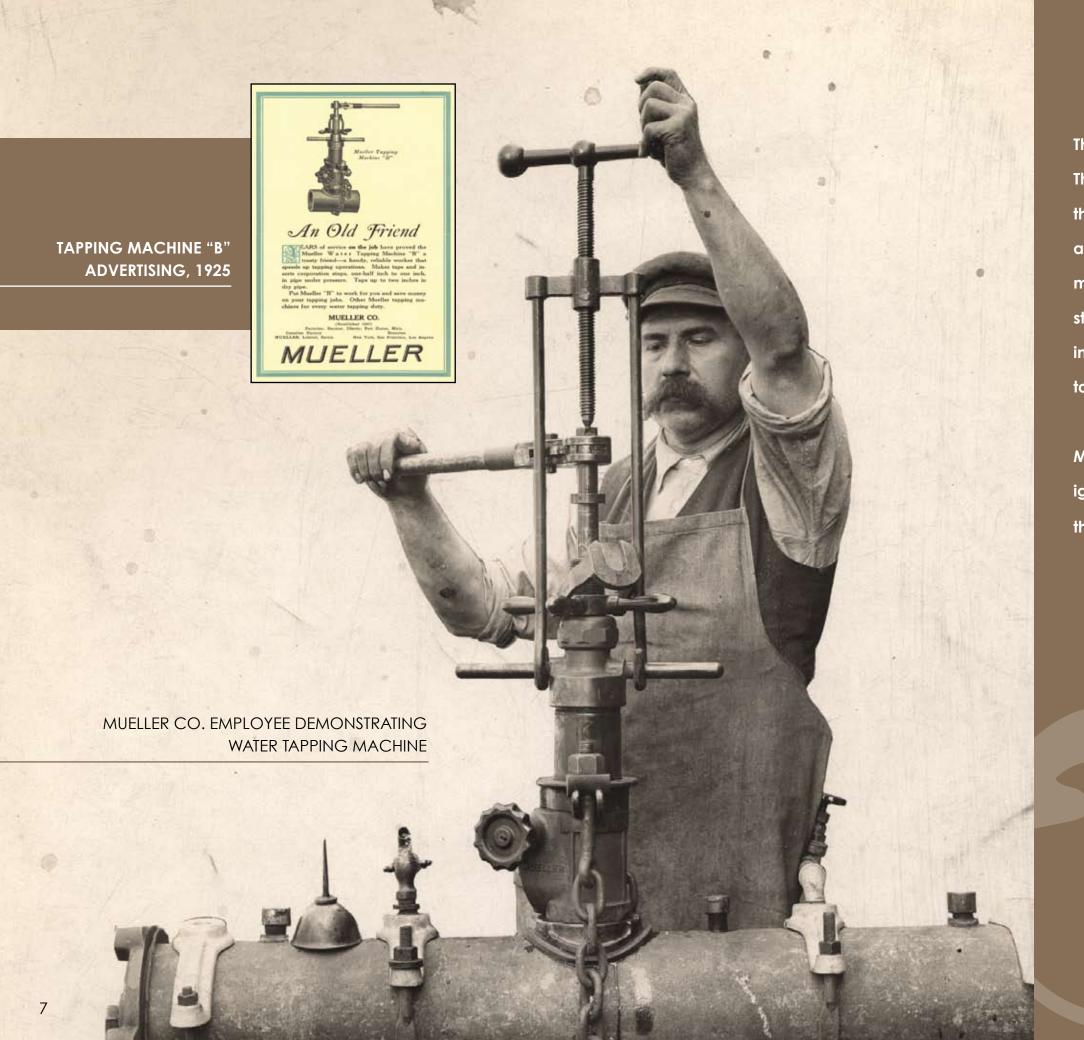
Decatur and Mueller's business grew quickly, relocating first to the 100 block of N. Water Street, then in 1859 to a larger building in the 200 block of E. Main Street. Around 1870, Decatur needed water taps to accommodate its growing population and turned to Mueller to make them. As city tapper, Mueller had to connect new customer service lines to the water main.







100 N. WATER, 1858



The tapping process in the late 19th century was literally hit or miss.

The "hit" meant driving the tapered inlet of a special valve into the side of the water main under pressure and into a hole drilled almost through the pipe wall. The "miss" came not from missing the valve, but from the frequency of valves that didn't stay wedged in the main or splitting the main pipe during installation. Water often flowed uncontrollably causing the tapper to scurry from the ditch for safety.

Mueller's natural inclination to always look for a better way was ignited by the hit or miss valve tapping, and ultimately led to the first water-related products of his new business.

#### FAUCET FACTORY, CORE ROOM

"Mater often flowed uncontrollably causing the tapper to scurry from the ditch for safety."







EMPLOYEE IN FAUCET FACTORY

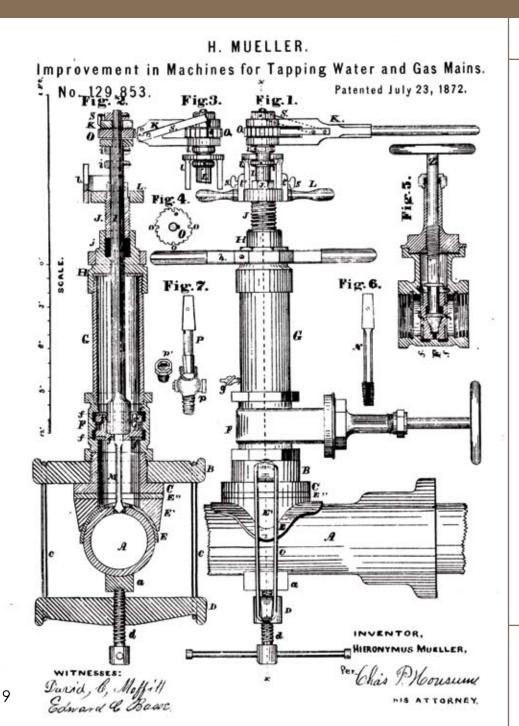
222 E. MAIN ST., 1872

#### PERFECTING THE WATER TAPPING MACHINE

In Mueller's day, tapping machines sought to install the special valve directly into the pressurized main, but they used awkward and imprecise sliding or rotating mechanisms to drill the hole, position another tool to tap it, and finally attempt to align and insert the valve to the main. Alignment of those separate processes hindered early machines from working reliably. Mueller developed the single-bar, two-chamber machine concept that solved the alignment problem, and he patented the new machine in 1872 for water and gas lines.

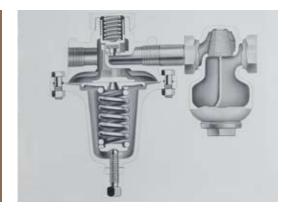
To complement his new machine, Mueller designed a special threaded valve instead of one wedged into the hole in the water main. For additional manufacturing space, Mueller built a three-story factory at 222 E. Main Street.

The valve and new tapping machine were the origin of today's water works product line. The drilling and tapping machine made by Mueller today, the B-101™ machine, uses his original concepts to seal water inside the machine. The B-101 machine is the most widely used in North America.



"B" MACHINE PATENT

#### **REGULATOR & RELIEF VALVE**





LARGE GATE VALVES

#### **RUMBLINGS OF AN INVENTIVE GENIUS**

Soon after patenting his tapping machine, Mueller turned to the problem of high pressure in the water distribution system that caused leaks and property damage. In 1882, he patented the water pressure regulator. Mueller worked for eight years in the basement of the family home on W. Wood Street to perfect the design. His family endured terrible rumbling and banging in the home's water pipes as he varied the design, often working into the early morning hours.

Mueller became so well known for the regulator valve that when the U.S. government in 1913 looked for a way to stop ships from ramming the gates of the newly opened Panama Canal, consultants sent the government to Mueller. The company's solution was to adapt its pressure regulating valves to snub the movement of massive chains draped in front of gates to stop errant ships. To this day, 95 huge Mueller® Regulating Valves protect the locks of the Panama Canal.

#### ONE, TWO ... THEN THREE

By 1885, Mueller's business interests in Decatur had grown to three separate operations. His original gun-making business grew into a line of sporting goods and moved to 138 Merchant Street to relieve crowding at the E. Main Street factory. The brass valve factory expanded to a broader range of brass plumbing fixtures.

The steady growth in water works products and plumbing fixtures forced another move, and the plumbing business was separated at 249 E. Main Street in 1887. Each move accelerated growth, and in 1891 the three-story Mueller Block at 257 N. Main Street was built for the plumbing business. In 1892, the gun and sporting goods store moved to a larger space at 134 Prairie Street.

By now, the superior quality of Mueller brass goods was so widely known that orders were burgeoning. A large site for a new factory was purchased at the corner of W. Cerro Gordo and N. College Streets, and the building occupied on September 7, 1895. The site would expand into Mueller's current W. Eldorado location.



138 MERCHANT ST. 1885 - 1892



249 E. MAIN ST. 1887 - 1891



237-39 N. MAIN ST. 134 PRAIRIE ST. 1891 – 1896



1892 - 1896

## Lection 2

### Tired of Horsing Around



WILLIAM JENNINGS BRYAN PRESIDENTIAL CAMPAIGN OCTOBER 23, 1896 MR. BRYAN, MR. MUELLER, MRS. BRYAN, MR. M.C.IRISH

#### PUTTING THE HORSE OUT TO PASTURE

When the Benz Auto was introduced in Germany in 1895, Mueller, never a fan of horses, arranged to have an auto shipped to Decatur. The Benz, although a mechanical marvel, served poorly as a conveyance. It balked at even the slightest hill and didn't have a reverse gear. Mueller immediately set out to completely rebuild the machine. He added a third forward gear, a reverse gear, and a radiator for which he was granted a patent.

In 1895, the Mueller car participated in the first American automobile race staged by the Chicago Times-Herald newspaper. Among the entries was a Duryea car from Springfield Mass. In that race, the Mueller car finished first and Duryea second. The newspaper nullified the race in favor of a second running it hoped would generate more interest. In the second race on Thanksgiving Day, the Duryea finished first and the Mueller second, averaging just 5 mph over the deeply snow covered course of 55 miles.

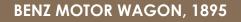
The Mueller car, a popular sight on Decatur streets, carried William Jennings
Bryan on his visit to the city in the 1896 presidential campaign. Local residents
crowding to him and the car were so numerous that Bryan delivered his speech
from atop the machine. It was Bryan's first ride in an automobile.



FRED MUELLER
NEXT TO CAR, 1896

"Decatur might have become 'Detroit on the prairie' had Mueller lived because of his association with automotive pioneers."







Mueller, at one point, would have over 100 auto-related patents. With so many improvements, historians call his automobile the Mueller-Benz. It was able to travel cross-country at the then dazzling speed of 10 mph on little more than a penny's worth of gas per mile.

While experimenting on carburetors in 1900 using high-test gasoline, Mueller took leave of his usual caution and lighted his pipe. The explosion severely burned Mueller, and on March 1, 1900 he died, and along with him his dream of manufacturing automobiles. In its grief, the Mueller family sold off all vestiges of his automobile, of which there were three in various stages of construction.

#### M.B.A. BALL TEAM, 1900

#### ONE BIG FAMILY

Interest in the welfare of employees — on the job and in their private lives — has been a characteristic of the Mueller Company from the beginning. In the early days, athletic teams were formed and provided venues on company property for outdoor and indoor events. There was a company band that played for employees at gatherings, newlyweds were given gifts, and new parents received a rocking chair or were loaned a crib. A school during business hours taught skills to allow employees to progress to better positions within the company. At Christmas, food was given to each employee and retiree — a live goose in the early years and later a bag of groceries. Until recently, employees received a large ham and three pounds of bacon.

In 1912, the company purchased 72 acres on Lake Decatur's south shore. Eventually, 1,500 acres were bought, encompassing most of what is now the South Shores area of Decatur. A "Muellerville Village" was envisioned that would include a new factory surrounded by employees' homes that the company intended to help them purchase.







FACTORY, CIRCA EARLY 1900

**MUELLER BAND** 

As part of the village, the company planted thousands of pine and other species of trees and flowers. Athletic fields, clubhouse, and a dam to hold back a stocked fishing pond were built. A lodge was added in 1920 along with a replica of the original Mueller Gun Shop outfitted with some of Hieronymus Mueller's original tools.

Circumstances beyond the company's control dashed plans for the village. While most land holdings of the original Mueller Heights were sold, an area of about 17 acres remained around the Mueller Lodge. The lodge and remaining land were donated to Millikin University in 1986. The athletic fields are now private homes, as well as the clubhouse that was converted later. Still standing is the old dam, visible in the ravine behind 1st South Shores Avenue. The Gun Shop replica was donated to the Macon County Museum and moved to its current site near Long Creek.

Mueller Lodge with its impressive fireplace of fieldstones was removed in 2007 to make way for private development on the Sangamon River bluff. The legacy of Mueller Heights is retained by the name on the gates of the development.

#### MUELLER CO BUILDINGS WITH ST. LOUIS WORLD FAIR SIGN



"Mueller's copper taking production was

the introduction of copper piping

for domestic plumbing."

#### NORTH OF THE BORDER

In response to the considerable volume of brass products shipped to Canada, the company by 1912 had constructed a new factory in Sarnia, Ontario. The Canadian plant made the same brass products as those in Decatur.

To support the First World War effort, Mueller in 1917 made detonator fuses for 75mm high-explosive shells. Because brass rod to make detonators was in such short supply, the company built a brass rod mill in Port Huron, Mich. across the St. Clair River from the Sarnia plant, establishing the Mueller Brass Company.

At the end of the war, the plant converted to production of copper tubing supplied in coils to customers. Mueller developed a special line of fittings, valves, and tools for the tubing. This was the introduction of copper pipe for domestic plumbing. Within four years, most water utilities in the U.S. had converted to copper service lines. Mueller Brass was sold in 1927 to one of the Mueller sons; the company today continues to make copper fittings and tubes for plumbing.

**BRASS SERVICE PRODUCTS** 





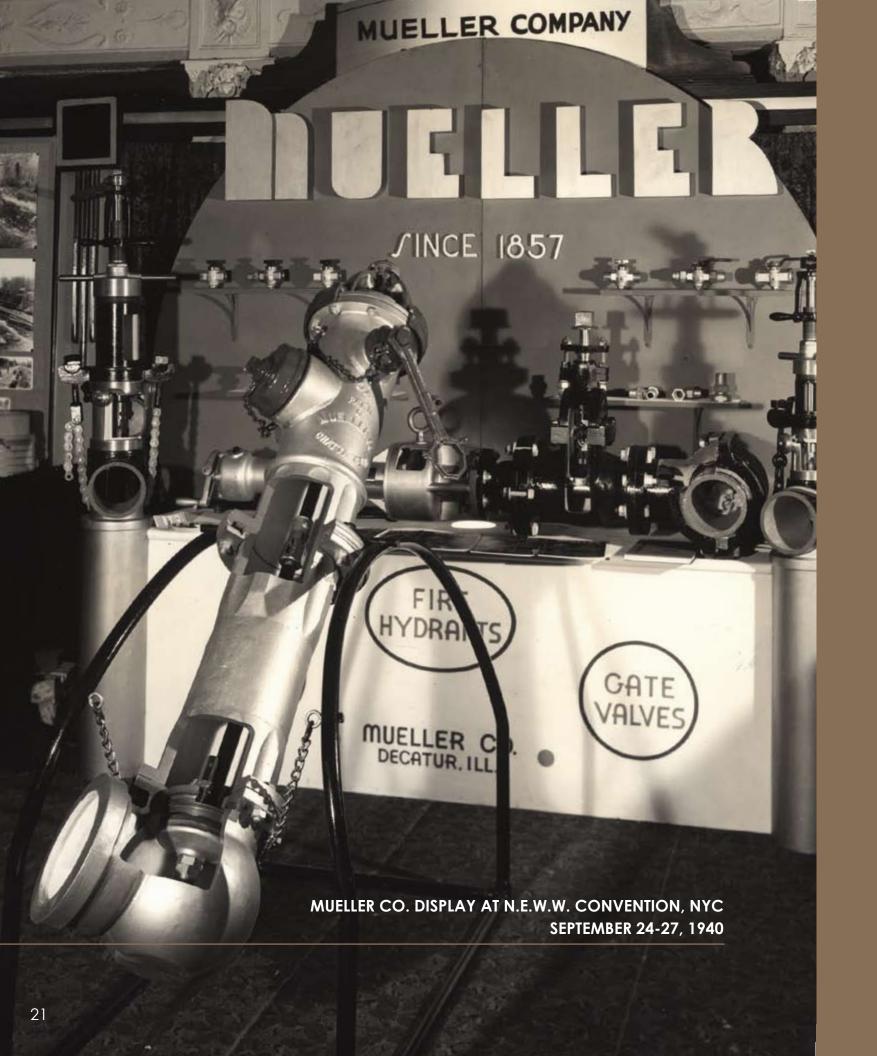




#### FIRE HYDRANT DEBUTS

Expansion continued rapidly with the Mueller purchase of Columbian Iron Works in Chattanooga, Tenn. in 1933. This acquisition added fire hydrants and cast iron gate valves up to 36". Mueller hydrants were soon at the forefront of hydrant sales in North America.

By the mid-1970s, the Mueller® Centurion Fire Hydrant was introduced and was the culmination of cutting-edge hydrant design. A new foundry and manufacturing plant were built in Albertville, Ala. The plant produced its 1 millionth fire hydrant in 1989, earning Albertville the title of "Fire Hydrant Capital of he World." The plant manufactured the 3 millionth hydrant in 2007. Today, almost half of all fire hydrants sold in North America are Mueller.



## LUCIEN MUELLER INSPECTING WWII AMMO



Home Sweet Home



World War II like the First World War found Mueller supplying munitions for the war effort. The company's engineering expertise helped shape history with a special 57mm projectile.

German Field Marshal Erwin Rommel was moving into North Africa with tanks that had 3" thick armor that conventional 57mm shells could not pierce.

Mueller engineers developed a process that allowed shells to pierce

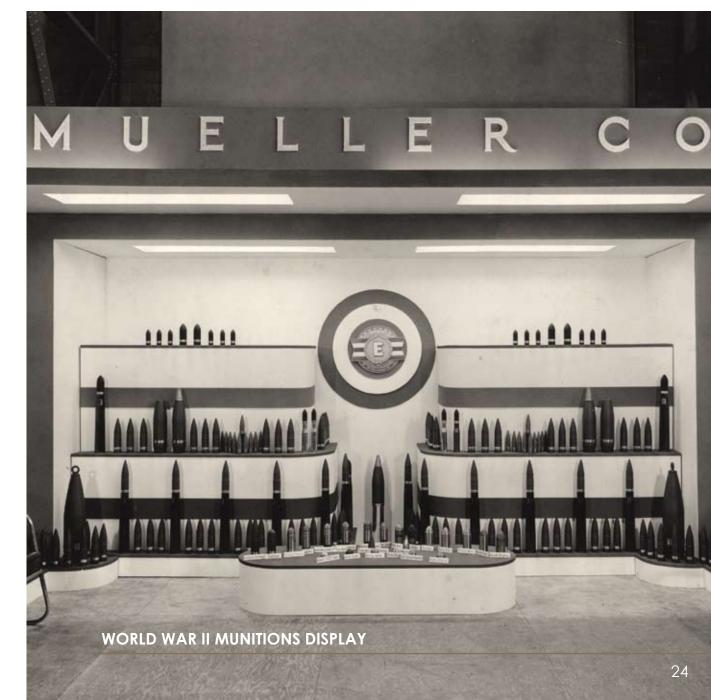
German armor, helping the U.S. Army to repel Rommel's forces.

The wartime aviation industry proved the effectiveness of the O-ring to seal fluids and gases, and it soon attracted the attention of Mueller engineers who saw application for Mueller products. Previously, the company's products used several sealing methods, from a basic tight metallic fit with grease between parts to specially treated cord wound and compressed mechanically around movable parts. These old seals suffered from wear and the need for frequent adjustment. Replacing them with O-rings put Mueller valves and machines in the lead for reliability and convenience.



**E FLAG** 



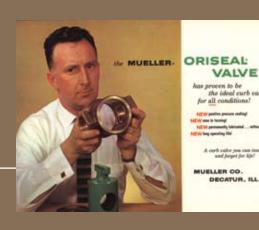




"The Oriseal" Valve Line of O-ring sealed brass water valves provided long-term sealing and something unique - easy turning."



## ORISEAL VALVES ADVERTISING POSTCARD



Mueller was the first to apply the O-ring to iron gate valves and machines used by the water industry. In 1949, the company introduced the first O-ring sealed valve on gas meters. By the mid-1950s, Mueller had designed and patented a line of O-ring sealed brass water valves, called the Oriseal® Valve line, that provided superior long-term sealing and something virtually no other service valve offered – easy turning.

#### MUELLER MUSEUM





FACTORY, CIRCA 1950

#### **FAMILY TIES**

The Mueller family was directly involved with the ownership and management of the company for its first 125 years. The last Mueller family member to work for the company was Frank H. Mueller, the founder's grandson, who retired in 1968 as vice president of engineering. The family sold its interests in the company in 1986.

While the Mueller family no longer has a direct involvement in the company, it retains a unique presence in the H. Mueller Museum. The Mueller Family Foundation erected the two-story museum on land leased to it by the company at the headquarters in Decatur..

### DECATUR IS HOME

Mueller's 150th anniversary can be viewed not merely as the age of a company, but as 150 years of commitment to Decatur. The high quality of the Mueller product has driven the company's years of growth. The root of this quality, however, is the committed local people who put the quality into those products and respond to customers' needs. In 1953, Mueller moved its brass foundry into larger space at Garfield and Jasper Streets. Today that foundry is among the largest brass foundries in the world. As part of the corporate consolidation of brass manufacturing to Decatur, foundry capacity has been expanded again with three state-of-the-art computerized molding systems representing an investment in Decatur exceeding \$20 million.

By the early 1960s, the building of the Eldorado Street factory encompassed what had been four city blocks and the intersection of Cerro Gordo and N. College Streets. The original 1895 factory façade is still visible inside, and a notable artist who worked with major architects of that era designed the mural on its front. It shows the progression of Mueller buildings and products from 1857 to 1963. Although updated many times, the most complete modernization of the Decatur factory took place in 1993 when more than \$12 million was invested. In 2007, additional corporate consolidation moved the brass products made in Canada back to Decatur.

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#### DIFFERENT YET SAME

The Mueller name today represents more than 12 manufacturing locations in the U. S. and Canada, with its products reaching all parts of the world. Since late 2006, it is also the name of the company's new parent corporation – Mueller Water Products, Inc., headquartered in Atlanta. Mueller Water Products, a \$2 billion corporation, is the largest pure-play water infrastructure company in the Americas.

While the past 150 years have seen vast change in the company, many things born in Decatur remain the same. Mueller Company's business philosophy continues to reflect the values of a founder who had a reputation for "always looking for a better way." The Mueller motto still rings true:

"Never make a product you would not be proud to put your name on."



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