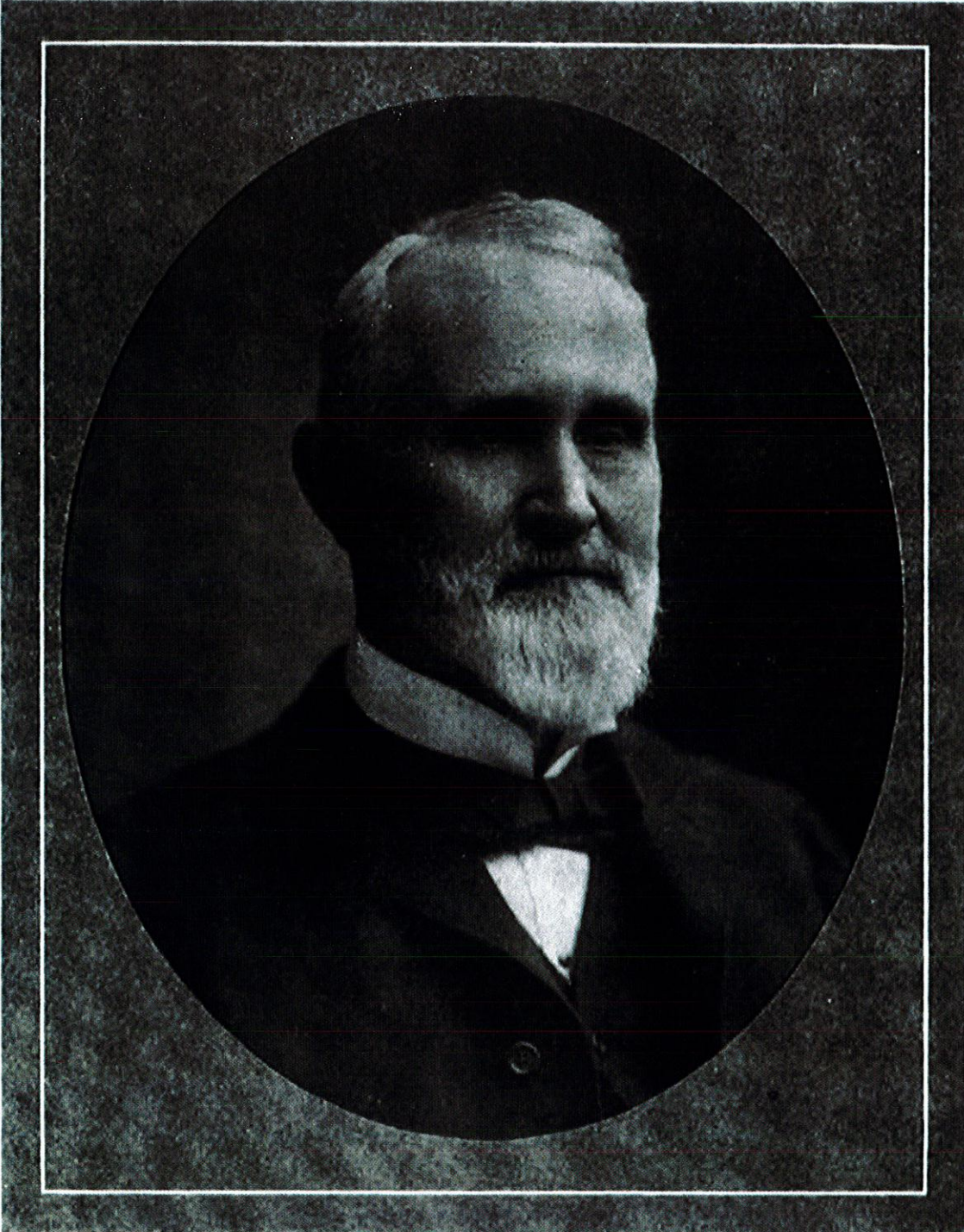


CHARLES CLARK WELCH AND THE WELCH DITCH



Charles Clark Welch

Charles Clark Welch (14 June 1830 – 1 February 1908) was born in Pamela, Jefferson County, New York. Welch was a descendant of Elder Brewster of the Mayflower Colony. He studied to be a teacher but only taught a few years and at age 20 traveled, seeking mining opportunities in California in 1850 and later in Australia. Returning New York in 1854, he relocated to Chicago in 1855, where he had worked in real estate and brokerage for five years.

Paul Haseman, November 2018

In March 1860 he arrived in Denver on the thrice-weekly stage coach from Ft. Kearny, Nebraska. He moved quickly on to Gilpin County, where he returned to mining as a successful placer mining entrepreneur.

Relocating to Golden, he and William Loveland in 1865 founded the Colorado Central Railroad, which was the first railroad into the mountains.¹ Welch served as a Colorado Central RR Vice President and Director for many years.² He was also a director in the Santa Fe Railroad. Additionally, as a Golden businessman, he served as President and a Director of the Golden Branch Office of the Great Western Fire and Insurance Co.³

In 1886, Golden Fire Department maps show Welch's ownership with businessman, John C. Hodges, of both the Cambria Brick and Tile Company on the south side of Clear Creek and the White Ash Coal Mine at the end of 12th Street.^{4 5} Welch owned the adjacent land to the coal mine and leased the clay mining rights to George Parfet.⁶ Welch also purchased land on the south portion of Golden, which land is still labelled the Welch Addition.

At the request of Episcopal Bishop George Randall⁷ in 1868, Welch donated 12 acres from his "Welch Addition" property to help achieve Randall's goal for an industrial college in Colorado.⁸ In 1870, with a

¹ With Denver's success gaining the link to the Transcontinental Railroad in Cheyenne, the CCRR then sought to connect with the Denver Pacific. On 24 September 1870, the CCRR completed its tie-in with the Denver Pacific at "Jersey Junction" located approximately three miles north of Denver. Next, the CCRR headed up Clear Creek Canyon and on 1 September 1872, track was completed 13.3 miles to the intersection of Clear Creek and Forks Creek. By mid-December, the line had been extended 7.7 miles further to Black Hawk and by 24 February 1873, a second line from Forks Creek had been extended 3.3 miles up Clear Creek to Floyd Hill. In September, the CCRR's shop in Golden produced Colorado's first passenger car.

² Edward Berthoud surveyed the CCRR route and also surveyed the route to Utah (now US 40) via Berthoud Pass. He likely also surveyed the Welch Ditch, but this is not confirmed.

³ Other Officers and Directors of the Insurance Co. included: Directors in Colorado Branch, C. A. Clark; Advisory Board, Geo. West; Stockholders, W.A.H. Loveland, Vice President C.C.R.R.; C.C. Welch, General Business; C.A. Clark, Merchant; C.S. Abbott, Hotel Keeper; Geo. West, Printer and Publisher.

⁴ Welch and Hodges purchased the White Ash Mine in January 1885, Colorado Transcript, 21 January 1885. Welch owned the mine at the time of its disaster, which drowned 10 miners on 9 September 1889.

⁵ In addition to the White Ash Mine, in 1878 Welch opened a large coal mine in Louisville in Boulder County, Colo., known as the "Welch Coal Mine," which mine he operated successfully for several years and eventually sold it to Jay Gould of New York, reserving a royal interest.

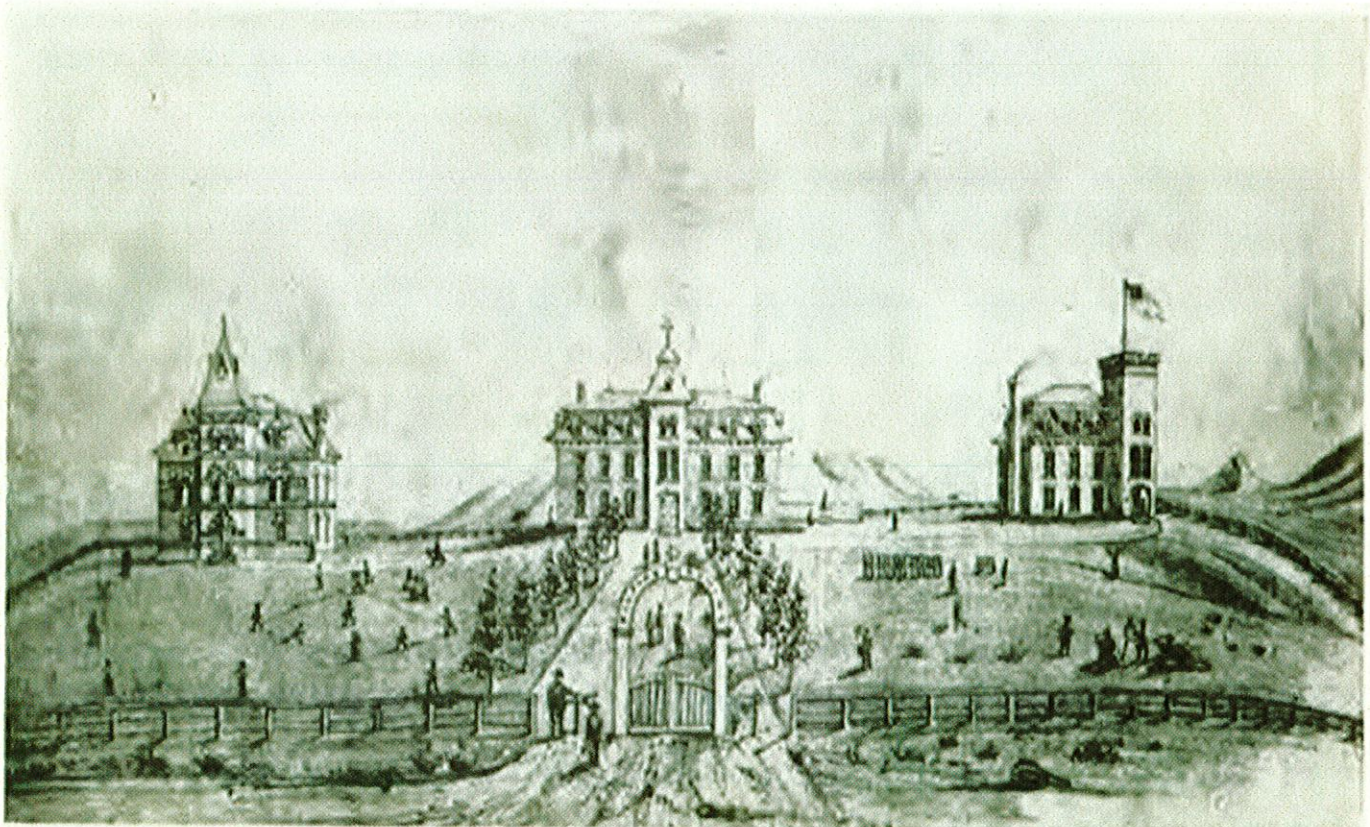
⁶ Born in Wales, George Parfet (1821 -1881) entered the coal mines as a young teen. He came to America in 1844. Settling in Pennsylvania, he continued coal mining. He moved to Colorado in 1874, where he continued coal mining five miles north of Golden in the Ralston Valley area. He moved his family to Golden in 1877. In that year, Parfet and his son, George W. Parfet, began clay mining on leased land next to the White Ash Coal Mine south of Marv Kay Stadium. Golden became the center of the Clay Mining business in Colorado, with Parfet operating 13 of the 15 clay mines in Jefferson County, to include the Apex Clay Mine. G.W. Parfet also founded the Golden Fire Brick Company. Bricks from the Parfet's brick company were used in the Jeffco County Building (Taj Mahal), the Governor's mansion, and other buildings in Denver and Golden. Clay from his mines was also used by the Herold China and Pottery Co., which later became the foundation of the Coors Porcelain division. The Parfet family continued the clay mining business for 130 years. Some of the Clay Pits were donated to the School of Mines and others sold to the City of Golden in 2002 to be used for part of the Fossil Trace Golf Course and Splash Water Park.

⁷ George Randall was the Episcopal Missionary Bishop for Colorado, who came to Denver in 1866. He was the driving force in founding the Colorado School of Mines but died in 1873 prior to opening of the first Mines building.

⁸ Rocky Mountains to the World, Wilton Eckley, 2004, p. 15. Quoting Den Galbraith from his book, "Give'em Hell, Mines" "The Territory, if it were to have any worthwhile gain from its mining endeavors, it needed a cadre of individuals trained . . . in the essentials of successful mining."

\$3872 Territorial appropriation for a mining school, Randall opened Jarvis Hall, a boys' boarding schools,⁹ and in 1872, the Divinity School in St. Mathews Hall. And, in 1873, on the same property, Randall opened a third school, the Industrial Mines School under the auspices of the Episcopal Church.

Meanwhile, Welch was elected to the Territorial Legislature representing Jefferson County in 1872. In 1873 Welch introduced the bill to establish the Territorial School of Mines, which, when enacted, included an appropriation of \$5000.¹⁰ Territorial Governor Routt signed the Bill on February 9, 1874. Upon enactment, the five acres of land on which the Mines building stood, among the 12 acres previously donated by Welch, was deeded by the Episcopal Church to the Territory to include a "quit claim" deed from Welch. In 1877, following statehood in 1876, Welch introduced similar legislation for the "State School of Mines at Golden." Upon Statehood, the State School of Mines also became part of the State Constitution.¹¹



Courtesy of Mrs. E. T. Boyd

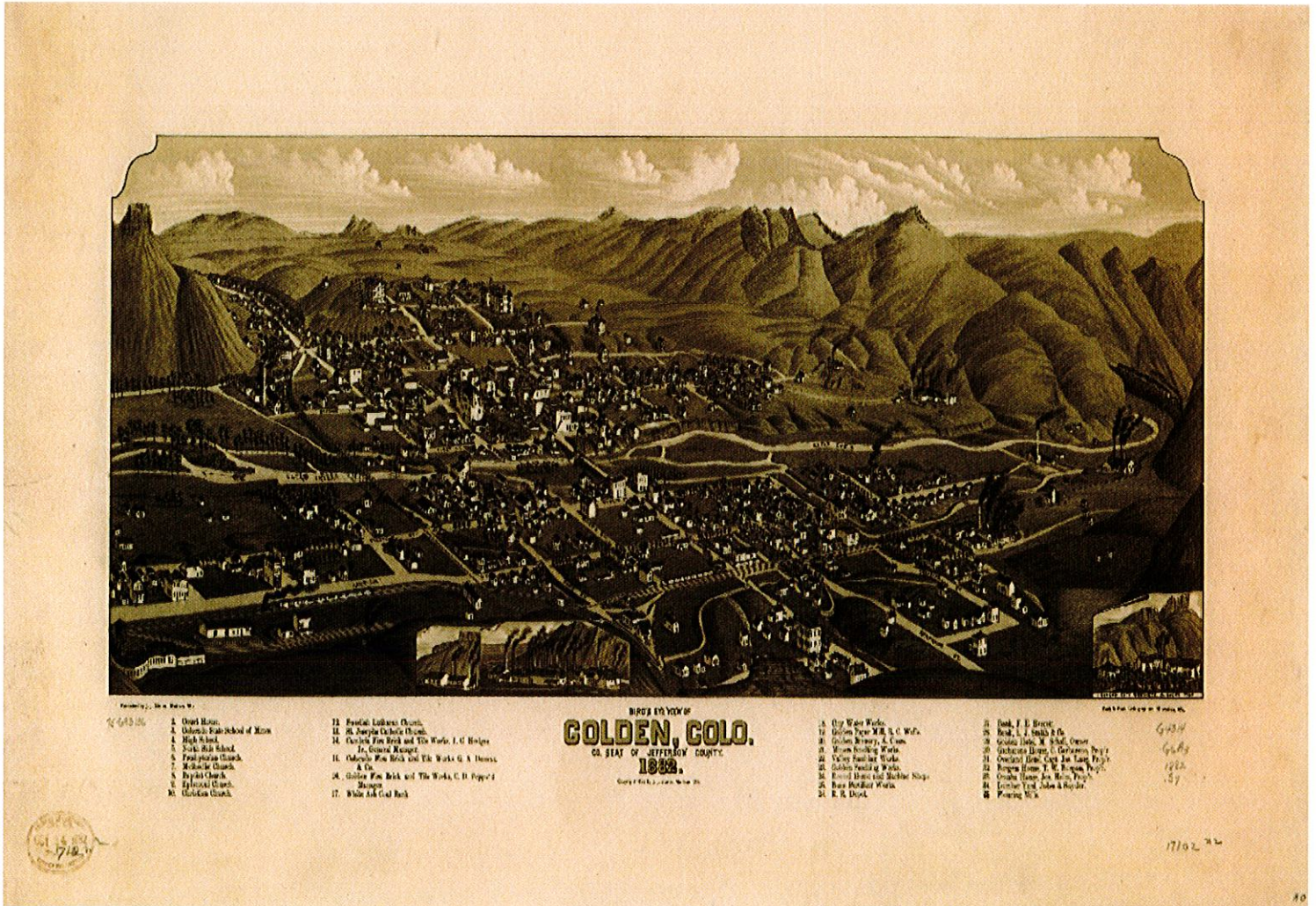
COLORADO SCHOOL OF MINES (RIGHT), JARVIS HALL (CENTER), AND ST. MATTHEWS DIVINITY SCHOOL (LEFT). ON SITE OF PRESENT STATE INDUSTRIAL SCHOOL, GOLDEN.

⁹ Rev. Thomas Bellam was the principal of boarding school as well as a Professor of English on the then seven-member Mines faculty. The prior to construction of the Mines building, course in geology and engineering were taught in Jarvis Hall and Jarvis Hall was a source of students for the initial Colorado School of Mines.

¹⁰ William Loveland was elected President and Edward Berthoud, Registrar. On the faculty, Geo. West taught Military Tactics and Edward Berthoud taught Civil Engineering and Geology. A lesser known faculty member was Rev. Arthur Lakes, who taught Drafting. Lakes later became renown as a geologist and headed the CSM Geology Department. Several sources state that Charles Welch was also a Trustee, but this cannot be verified.

¹¹ Being part of the Colorado Constitution was helpful to Mines in its early days in opposing advocates for the University of Colorado, who sought to merge the School of Mines with the University of Colorado in Boulder.

The Mines Building was far from auspicious and in early in early 1878, Mines moved most of its activity to the Loveland Building, owned by William Loveland, the President of the Mines Board of Trustees. Shortly thereafter on 4 and 6 April 1878, Jarvis Hall and Matthews Hall burned. As such, Mines' dependency on Jarvis Hall for as its room and board facility was gone, making the old building even more untenable. Through Welch, Mines appealed to the Legislature and money was appropriated to construct the Mines School in downtown Golden on a small plot of land (150' x 150'), purchased and donated by Golden citizens to include Charles Welch. The new building opened on 13 October 1880 at the southwest corner of 15th and Arapahoe,¹² 100 feet from Welch's home at 1450 Washington Avenue. The original Mines building at the south end of Ford Road was then designated as the Colorado Industrial School for Boys.



¹² Mines Biennial Report (to the Governor), 1880

Other Enterprises:

At the request Bishop Randall, Welch also donated the land for Calvary Church.¹³ He also donated land for the Golden Cemetery in 1873.¹⁴

In 1891, Welch was also one of the promoters and builders of the Denver, Lakewood and Golden Railroad, for which company he served as president for many years. This was an electric trolley road, operating between Golden and Denver. Parts of the track route can still be seen as an elevated walking trail in Golden along South Golden Road.

In addition to Golden, Welch was a principal contributor to Jefferson, Gilpin and Larimer Counties. Welch also owned extensive farming interests. He had large tracts of farming land in Larimer County, and in one year he raised on his extensive farms, fifty thousand bushels of grain. To provide water for his farm acreage, Welch became an irrigation pioneer in Colorado. In 1870, he constructed the Welch Ditch in Golden and in 1878, he was one of the organizers and the president of the Handy Ditch Company of Larimer County. This ditch irrigated more than twelve thousand acres.

In Jefferson County, in 1889 Welch and W.A.H. Loveland formed the Lakewood Company and plated a 13 Block area (83 acres) along Colfax Avenue west of Denver in an area which later became the City of Lakewood. Welch's "country" home was his Welchester Estate, where a school (Welchster Elementary east of Colorado Mills Center on 10th Street) and an adjacent large park (Welchster Tree Grant Park along Welch Street) are currently located in Lakewood.¹⁵ Welch and Loveland were the founders of Lakewood.

Welch's Family and His Passing

Welch married Rebecca Jeannette Darrow on 22 May 1878. They had two children, Charles Clark Welch, Jr. and Jeannette Welch, later wife of Dr. Henry Strong Denison.

In his later years, Welch lived with his daughter, Jeannette, in Denver. In January 1908, Welch's daughter, Jeannette, accompanied him to Jacksonville, Florida, in hopes to stem his failing health. But to no avail, Welch died on 1 February 1908 at age 77. Funeral services were held at his Golden residence, 1450 Washington Avenue, under the auspices of the Masons, in which fraternity Welch was a 32nd degree Mason.

¹³ Charles Clark Welch – Pioneer Figures Who Helped Build Early-Day Golden by Mary E. Hoyt, Colorado Transcript, Mar 5, 1932. However, at least one other source attributes the land donation to William Loveland.

¹⁴ Colorado Transcript, 8 February 1908, Welch Obituary.

¹⁵ In addition to Welch's "country" estate, Loveland, the former president of the Colorado Central Railroad, retired to the new community of Lakewood after many years of living in Golden.

Welch Ditch

One of Welch's lesser known actions was the construction of an irrigation ditch to bring water from Clear Creek Canyon to his Golden property and to the then Territorial School of Mines. Welch had previously donated 12 acres to Bishop Randall in 1868 for the formation of an industrial school which later became the School of Mines. The Ditch was built by the Vasquez Flume & Ditch Company, of which Welch was an owner, and became known as the Welch Ditch.

Colorado Transcript, 4 January 1871

At a meeting of the trustees of the Vasquez Flume & Ditch Co. on Saturday evening a code of By-Laws were adopted and the following additional officers were elected:

Vice President, Henry Nutt; Secretary, E.L. Berthoud; Treasurer, C.A. Clark

The Executive Committee was instructed to make the necessary surveys and contracts for construction. Everything is now in working order and if good weather continues we expect to see operations commenced along the whole line at once. Right of way has been secured over the first five miles without cost to the Company, and as the requisite amount of stock has been subscribed, an abundance of water for this town is a sure thing.

Colorado Transcript, 19 April 1871

Work at present is being crowded upon the flume and canal of the Vasquez Flume & Ditch Co. The dam is finished, and gangs of men are busy along the whole line, so that water can be let into it as soon as needed. The lumber and limbers for the fluming are being strung out at points where they are required.

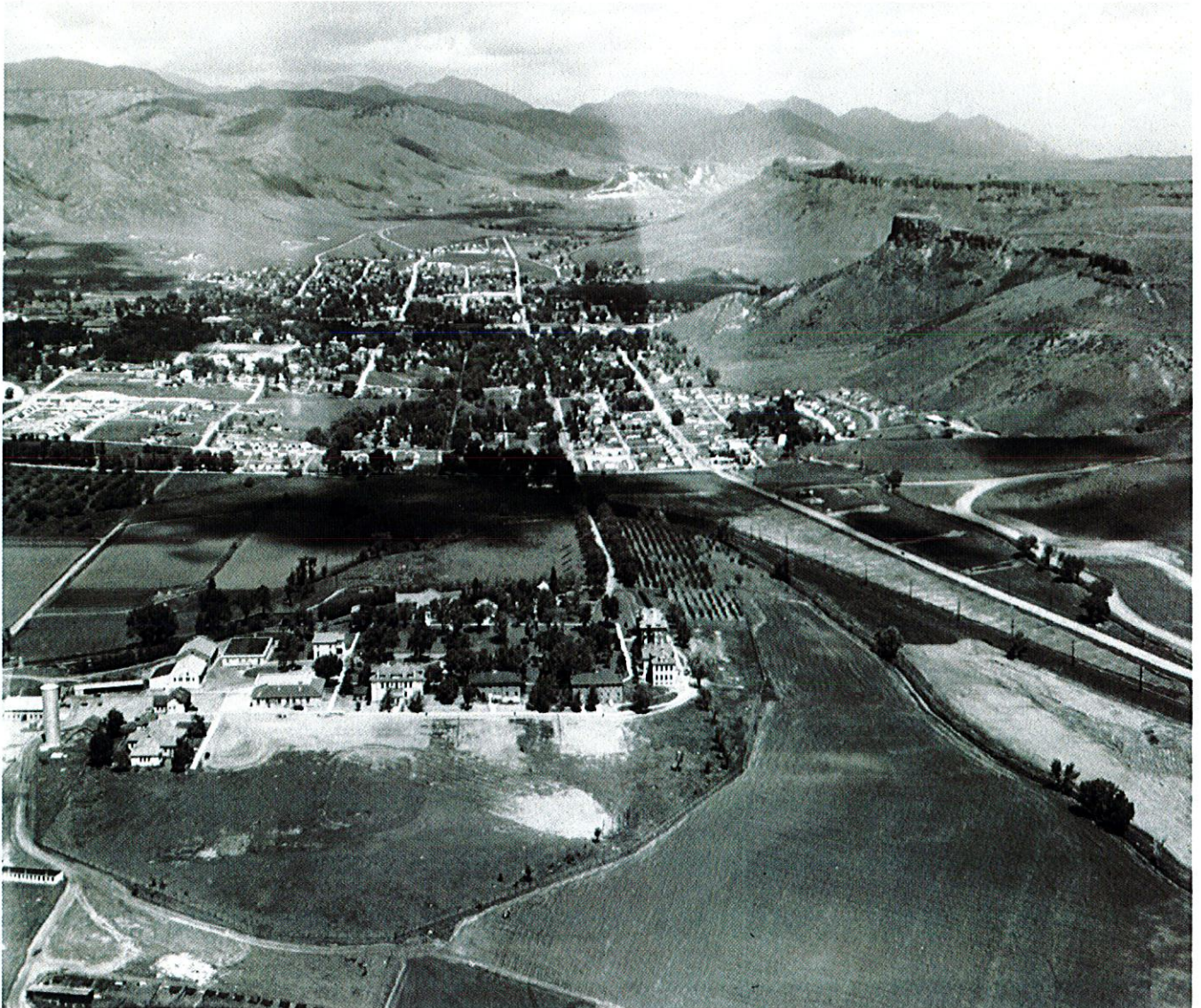
Construction in Clear Creek Canyon initially used wooden flumes, some of which were later replaced by concrete flumes, still visible today.¹⁶



In May 1871 the newly formed government of Golden¹⁷ granted the ditch its right-of-way through Golden. On 2 July 2 1871 water was turned into the Ditch for the first time and its water irrigated the southern blocks of Golden and the State Industrial Schools campus. In effect, the Colorado School of Mines was the impetus for the Welch Ditch.

¹⁶ William "Cement Bill" Williams replaced the original dam just beyond Tunnel One in Clear Creek Canyon after a major flood in 1896. He also installed one or more concrete flumes along the Ditch path on Mt. Zion. Additionally, and of greater significance, Cement Bill built the 4.6 mile Lookout Mountain Road, completed in 1913, with monetary assistance of Charles Boettcher and Adolph Coors. Taking advantage of the road, Boettcher built a hunting lodge, Lorraine Lodge, on Lookout Mountain in 1917. In that same year, Lookout Mountain Road routed over 1000 Coloradans by foot, horseback and car up the mountain to attend the burial of William Frederick "Buffalo Bill" Cody at mountain-top gravesite.

¹⁷ On 3 January 1872 the Town of Golden City incorporated and three weeks later the town Council dropped the word "City" from the town's title on 22 January 1872. Golden City became Golden.



This later photo shows the route of the Ditch in the tree line just above and left of the Industrial School. Also visible is the extension of the Welch Ditch in 1873 as seen in the sparse trees on both sides of then East Street in the lower left.

In 1873, William Loveland and Edward Berthoud invested in the Ditch bringing plans to extend the Ditch beyond Golden along South Table Mountain to irrigate William Loveland's land in present Lakewood. Thereafter, the Welch Ditch was reorganized and renamed the Golden Ditch and Flume Company. (Annual Statement, Colorado Transcript, 23 Jan 1876.) The route of the extended ditch can still be seen today along the west and north side of South Table Mountain.

Golden Weekly Globe 27 December 1873

Indications are now very favorable for early completion of the Vasquez Flume and Ditch running around Table Mountain, and an enterprise of considerable import to Golden and the farmers along the line. A meeting of the stock-holders was held in Loveland's block last Saturday pursuant to a call signed by a majority of the Board of Trustees.



For over 130 years the Welch Ditch provided water to the City of Golden. Its legal name was the Golden Canal and Reservoir Company but has always been known as the Welch Ditch. At its height of use, the Ditch irrigated 4000 acres in Golden and Jefferson County. Even though the water rights for the Welch Ditch were sold to the Agriculture Ditch and Reservoir Company of Lakewood, CO, water flowed in portions of the Ditch until 2001, when the Fossil Trace Golf Course was built.

In 2003 and 2006, the Golden Historic Preservation Board listed the Ditch as one of Golden's Most Endangered Historic Sites. To better preserve the Ditch's legacy, Jeffco Open Space has proposed to renew safe use of the Welch Ditch as a 1.5 miles walking trail in Clear Creek Canyon by re-construction of the wooden flumes, by removal of ditch debris, and by maintenance of a greenway along the Ditch. The Welch Ditch Trail will open in 2020 and extend from Chimney Gulch in Golden up Clear Creek Canyon to Tunnel #1. This trail will be part of the Colorado's Peaks to Plains Trail project, with the parallel bike trail below the Welch Ditch walking trail. Preserving the Welch Ditch helps ensure that future generations will know more about the Welch Ditch and its creator, Charles Clark Welch.

A Walk Along the Welch Ditch

Remnants of the route of the Welch Ditch through Golden can still be seen today. In Clear Creek Canyon the Ditch is prominent on the South Side of Clear Creek and the north side of Mt. Zion.



Provided by Jefferson County Open Space



As the Ditch exits the Canyon, it is readily identifiable on the west side of 6th Avenue along the east base of Mr. Zion until it intersects 6th Ave





The Ditch remains in use today in a drainage role. Drainage from Parfet Park Estates enters the Ditch, whose flow direction has been reversed by the City so that now drains to Chimney Gulch and then to Clear Creek. Likewise, along Illinois onward to the Fossil Trace Golf Course, Ditch drainage continues.

The Ditch route picks up on the east side of 6th Ave on the Mines campus. Originally, the Ditch rounded the north end of the hogback outcrop, where parts of the CSM Geology Trail now exists. The area to the right of this old photo is now School of Mines Parking Lot Q, which overlooks Marv Kay Stadium.



In 1909, then prominent miner Evan Jones drilled the bypass tunnel through the CSM hogback as shortcut, which also pleased 12th Street residents, who had complained for years about seepage from the original route. The tunnel entrance, now filled in, can be readily viewed along the 6th Avenue Trail.



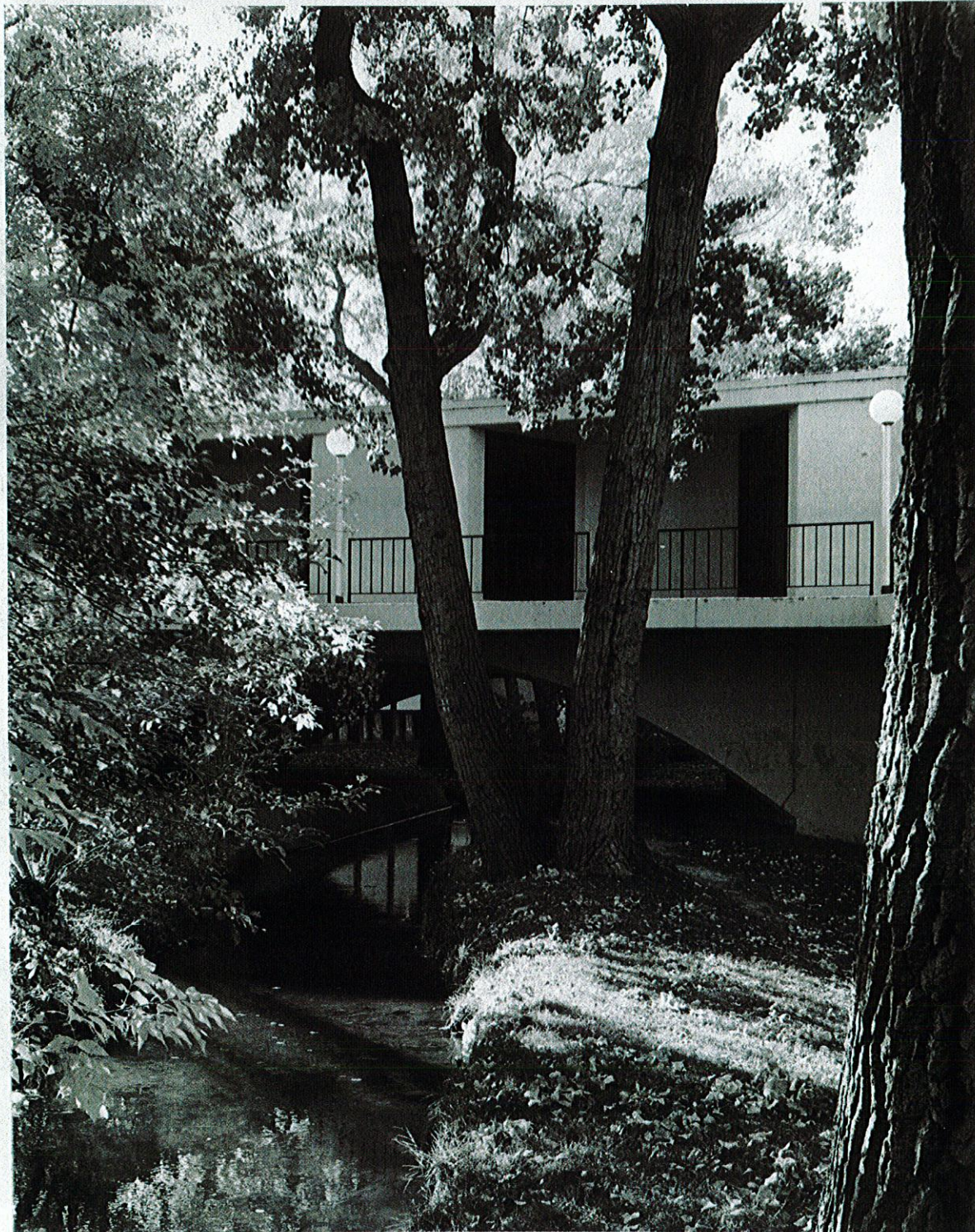
The actual tunnel is the lower less-visible hole in the hillside.

Below is the School of Mines Campus 1962. Note the Clay Pits at top center and the tunnel east of Hwy 6. George Parfet¹⁸ began mining clay in 1877 just south of present Marv Kay Stadium on 12 Street, right next to the shaft of the former and doomed White Ash Coal Mine.



¹⁸ Clay from the area of the School of Mines and the Fossil Trace Golf Course was mined for 110 years by the Parfet family beginning with George Parfet in 1877. Born in Wales, George Parfet (1821 -1881) entered the coal mines in Wales as a young teen. He came to America in 1844 at age 23. Settling in Pennsylvania, he continued coal mining there in the state's anthracite rich coal mines. He moved to Colorado at age 53 in 1874, where he continued coal mining five miles north of Golden in the former Murphy Coal Mine in the Ralston Valley area. He moved his family to Golden in 1877. In that year, Parfet and his son, George W. Parfet, began clay mining on leased land next to the White Ash Coal Mine on then 2nd Street, now 12th Street. This land, which is now part of the School of Mines, was owned by Charles Welch, who earlier donated land in 1868 for the original Colorado School of Mines location at the south end of Ford Road. Parfet did well with his clay mining, which clay was used by several brick, tile and pottery plants in Golden. Golden became the center of the Clay Mining business in Colorado, with Parfet operating 13 of the 15 clay mines in Jefferson County, to include the Apex Clay Mine. Son G.W. Parfet also founded the Golden Fire Brick Company. Bricks from the Parfet's brick company were used in the early Jeffco County buildings such as the Court House, the Governor's mansion, and other buildings in Denver and Golden.

On the Mines campus, the Ditch as late as 1972 went between the buildings of the CSM Student Center and Food Court (Maple and 16th). This portion of the Ditch was later filled in as was the Ditch upon construction of Brown and Maple Halls on Maple Street.



A further portion of the original alignment can be viewed today as the Ditch re-emerges on the north side of Lot E near 19th Street. CSM's construction of a new dormitory on 19th Street will lead to the demise of Lot E but the construction plan includes Mines landscaping of this portion of the Welch Ditch.





Other remnants in Golden can be seen on Fossil Trace Golf Course west of Illinois Street. The Ditch then crosses under Illinois and then takes a right turn to the south under 24th Street as is meanders further south along Cottonwood Circle.



It then passes behind Golden High School back onto the Fossil Trace Golf Course. Again, the Ditch continues to be used as a drainage ditch as it empties into the lake on the golf course.



The route of the Ditch is readily seen alongside and then behind Hole 1.

The Ditch continues then south beside Golf Holes 3 and 4 near South Golden Road with the former route going nearly up to Johnson Road.



The former path made a U-turn just before Johnson Road and travels back to a bridge cut (now filled in) under the current concrete trail atop the embankment, which embankment was originally built for the former tramway circa 1891.



The Ditch path then crosses South Golden Road at East and Sunset Streets.



The Ditch is very clearly aligned alongside East Street and Vernon and Table Drives to include a convenient footbridge over the Ditch along Lookout View Drive.





The Ditch is again easily seen just beyond the upper ends of 15th and 16th Streets.



The Ditch at the end of 15th Street looking north toward Coors.



The Ditch then turns east behind the Coors Brewery the then along South Table Mountain and then south to Lakewood.