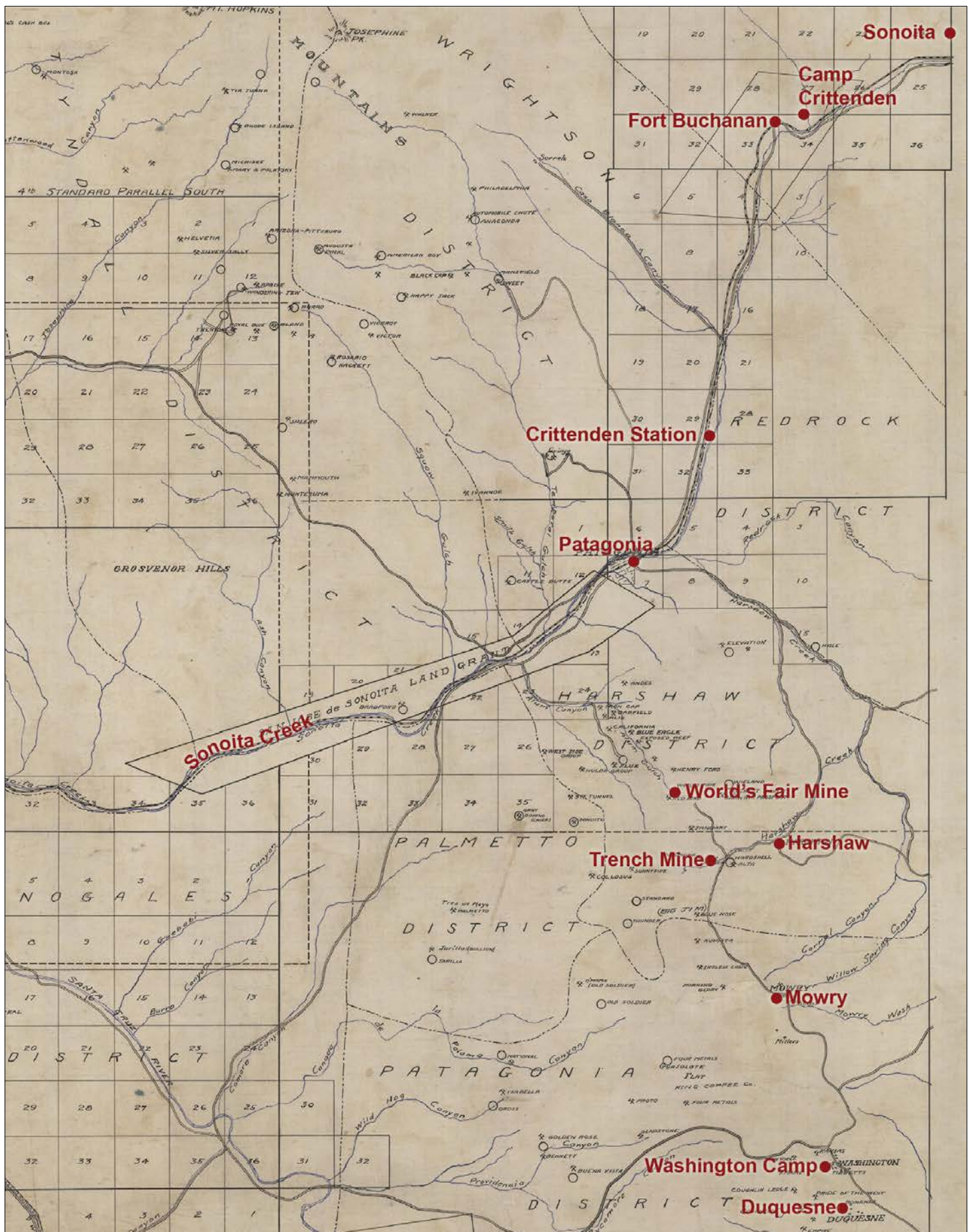


MINING AND HISTORY IN THE PATAGONIA MOUNTAINS



WestLand Resources





Portion of Mining Map of Santa Rita and Patagonia Mountains, Santa Cruz County, Arizona, prepared by the Nogales Engineering Company, Nogales, Arizona, 1917. Places mentioned in the text are highlighted in red. Arizona Historical Society (Tucson), Robert Lenon Map Collection, No. B91701.

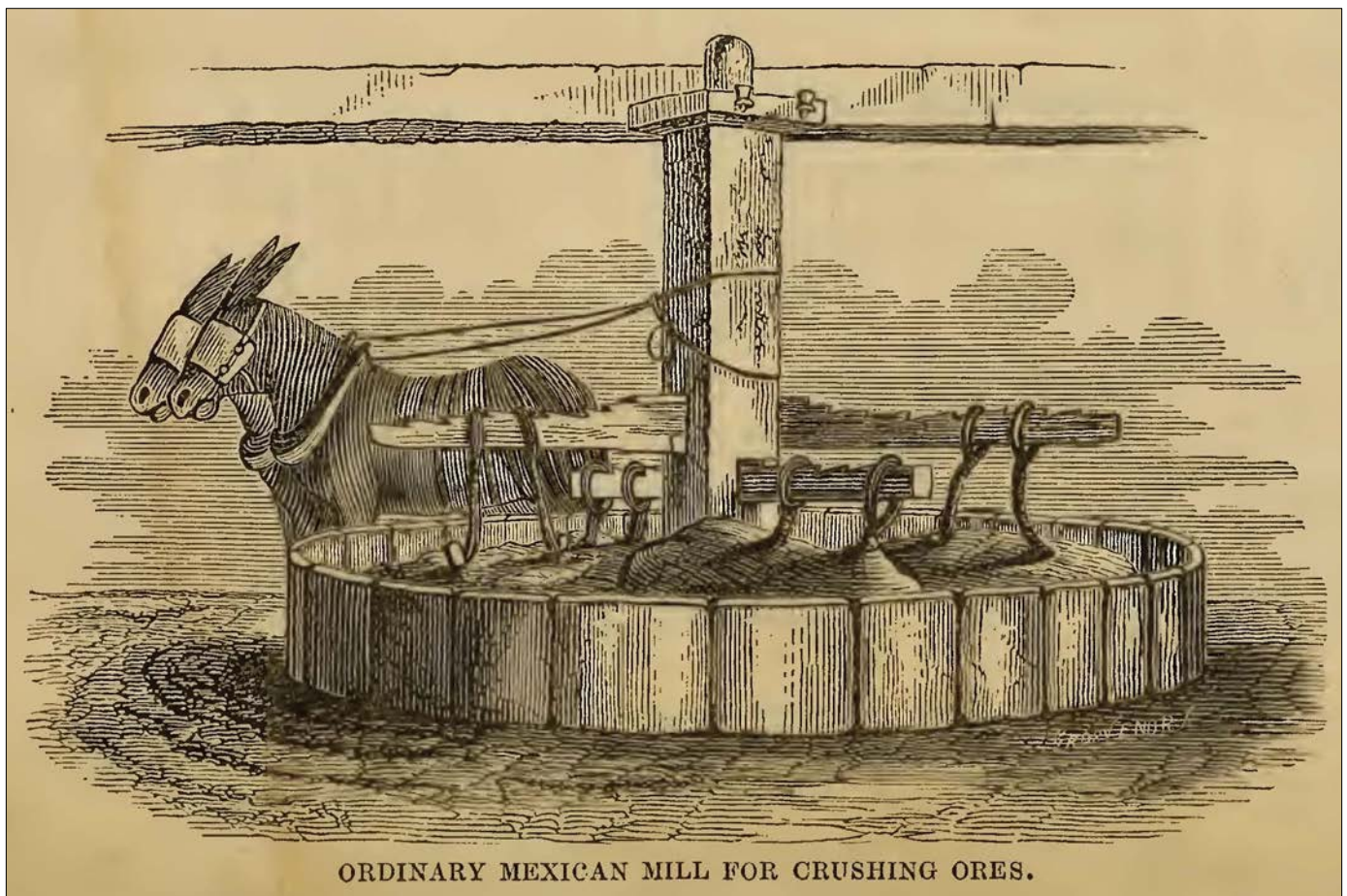
Early Mining in Southern Arizona

Southern Arizona, or the portion of the modern state between the Gila River on the north and the international border on the south, became a part of the United States in 1854. The Gadsden Purchase, ratified that year by Congress, added 29,670 square miles of Mexican territory to the United States in exchange for a mere ten million U.S. dollars. It was only a sliver of land when compared to the 525,000 square miles Mexico ceded to the United States at the end of the Mexican-American War, just six years earlier, but it was a valuable sliver. First, it gave railroad companies the relatively level corridor they needed to build a southern route across the Southwest to California. And second, it included the mineral-rich mountains of southern Arizona, where gold, silver, lead, copper, and other resources had long attracted the attention of Native American, then Spanish, then Mexican miners.

Native Americans were extracting useful materials from the earth for thousands of years before the first Europeans arrived in the New World. In southern Arizona, as elsewhere in the Americas, Native Americans made tools from stone, pottery from clay, pigments from powdered minerals, and jewelry from

precious stones like turquoise. In some places, these special materials could be gathered loose from the earth's surface, but Native Americans also quarried them from buried deposits. They were miners, just as their European successors were, even though the focus and scale of their efforts were different. Native Americans also mined metals, notably copper, which was used for making ornaments and tools in North America at least as early as 1000 B.C., and by the Hohokam people of southern Arizona as early as A.D. 1000. In Arizona, pure copper was collected and worked by Native Americans in its natural state, without smelting, but heat-based metallurgy had long been known and practiced by Native Americans elsewhere, including in western Mexico. Native American mining did not involve the deep shafts and tunnels of European mining and left little evidence on the landscape. For this reason, few Native American mines survive as historical sites, and no definite traces of Native American mining have been found in the mountains of southern Arizona.

Neither do any substantial traces of Spanish mining survive in southern Arizona, despite the many stories of abandoned, richly productive Spanish mines

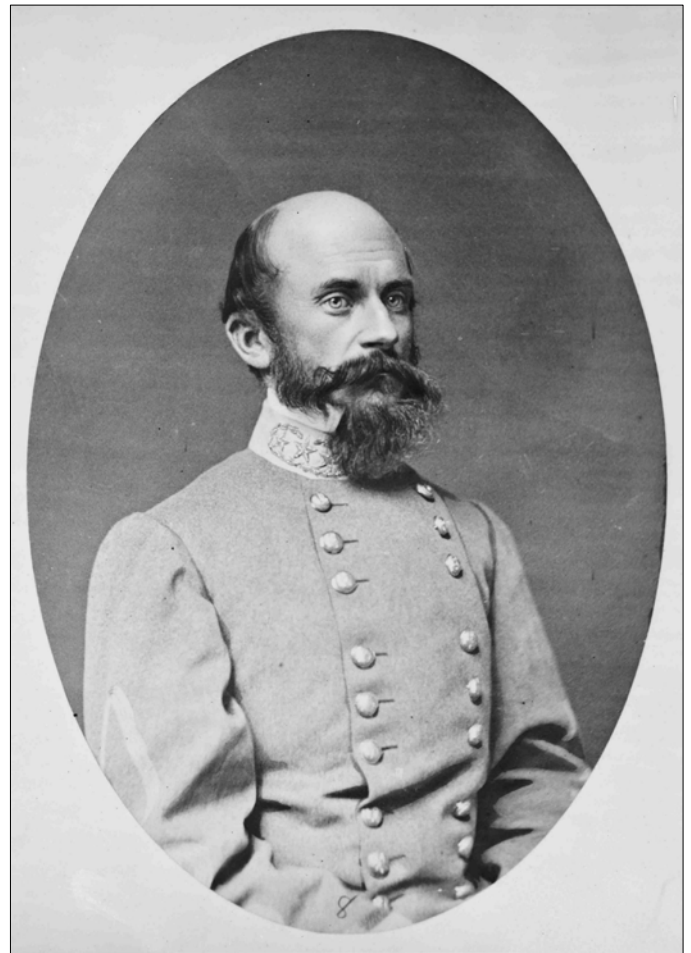


A Mexican *arrastra* for crushing ore, as depicted in an 1857 treatise on mining in southern Arizona, *Report of the Sonora Exploring and Mining Company* (Railroad Record Print, Cincinnati).

that circulated among Americans soon after the Gadsden Purchase. Southern Arizona was Spanish territory for nearly three centuries, about 1540 to 1821, but it was a remote part of a Spanish colony centered in distant Mexico City. Apart from a handful of exploratory expeditions in the sixteenth century and the missionary work of the Jesuits that began in the late seventeenth century, Spanish settlement of southern Arizona did not really begin until 1752, the year the Tubac presidio was established on the Santa Cruz River. The Spanish force at Tubac (and later at Tucson, where the presidio was relocated in 1776) afforded some protection to the civilians who settled along the river, but the constant threat of Apache raids meant that few settlers ventured into the surrounding mountains.

And it was only in the mountains where mining was worthwhile. Historical sources make clear that at least some mining occurred in the Santa Rita Mountains and other ranges during the Spanish colonial period, but Spanish mining in southern Arizona probably never amounted to much, and the exact locations that were mined are largely unknown. In the Patagonia Mountains, which became an important mining area only after the Gadsden Purchase, early American miners often reported that they were rediscovering lodes first worked long ago by Jesuits and other Spaniards. But these claims are hard to evaluate, and no definite evidence of previous Spanish workings survives today. Many such reports were part of a general American eagerness to portray southern Arizona as rich in mineral wealth, in hopes of enticing outside investors.

Mexico won independence from Spain in 1821. For the next 33 years, 1821–1854, southern Arizona was part of the Republic of Mexico. The obstacles to mining in the region before 1821—remoteness of markets, limited transportation, lack of proper equipment, and Apache raiding—remained after Mexican independence. Some mining undoubtedly occurred, including in the Patagonia Mountains, but evidence of Mexican-period mining is scarce, in part because early American miners focused on the same deposits first worked by Mexican miners, thus obscuring the earlier workings. Nevertheless, Mexican contributions to mining in southern Arizona are abundantly evident in the historical record of mining after the Gadsden Purchase. In the Patagonia Mountains, the earliest American mines relied on not only the labor of Mexican miners but also their expertise in underground mining and their technology for reducing and smelting ore. A good example is the *arrastra*, a simple mill used to extract gold and silver ore by placing it in a shallow basin and having mules repeatedly drag large stones over it, pivoting around a central post. The *arrastra*, along with the Mexican adobe-brick furnace, was soon replaced by more-sophisticated technology, but they were important tools in early American mining.



General Richard S. Ewell (1817–1872), Confederate States Army. As a captain in the U.S. Army, Ewell was a commander of Fort Buchanan along Sonoita Creek. He and his partners were the first American owners of the Patagonia (later Mowry) mine. National Archives and Records Administration, Washington, D.C.

THE APACHES.—A few days ago a band of Indians descended upon the Patagonia mine, some twenty-two miles from Fort Buchanan, and stole every head of horses and mules on the place, several fine animals among the number. The thieves went towards Sonora, crossed the line, killed one horse and ate him, and then made a straight track for the Chiricahui mountains. They probably belonged to Ca-chees' band, which haunts the vicinity of Apache Pass.

The early years of the Patagonia (later Mowry) mine were made difficult by frequent Apache raids. Cochise, called "Ca-chees" here, was the leader of the Chiricahua band of Apache that plagued settlers in southern Arizona from the 1850s until 1872, when he and the U.S. Army negotiated a truce. *Weekly Arizonian* (Tubac), June 16, 1859.



General James H. Carleton (1814–1873), United States Army. New Mexico History Museum, Palace of the Governors, Santa Fe, New Mexico.



Sylvester Mowry (1833–1871). Drawing by J. Ross Browne, *Adventures in the Apache Country*, 1864 (Harper and Brothers, New York, 1869).

The Patagonia or Mowry Mine

The Civil War and tensions between Union and Confederate sympathizers in southern Arizona caused a long delay in the building of a railroad across the region. The Southern Pacific railroad, extended eastward from California in the late 1870s, did not reach Tucson until 1880, 15 years after the end of the Civil War and 11 years after the final spike had been driven in the first transcontinental railroad at Promontory Summit in Utah. In 1856, just two years after the Gadsden Purchase, the U.S. Army established Camp Moore, its first outpost in southern Arizona, near the confluence of Sonoita Creek and the Santa Cruz River, some 60 miles south of Tucson. In May 1857, the post was renamed Fort Buchanan in honor of President James Buchanan and moved up the creek to a spot about eight miles north of the modern town of Patagonia. Because of its swampy location, Fort Buchanan was an unhealthy, malaria-infested place, and it soon met an inglorious end. On July 23, 1861, the Union Army abandoned and deliberately burned the fort to keep it from being used by a Confederate force pushing into Arizona from Texas. The Confederates occupied the same site for a time but also abandoned it, in May 1862, when the California Column, a Union force led by General James H.

Carleton, gained control of southern Arizona. Fort Buchanan was never reoccupied. The next U.S. Army post in the Sonoita Creek valley, Camp Crittenden, was not built until 1868, about a half mile from its ill-fated predecessor.

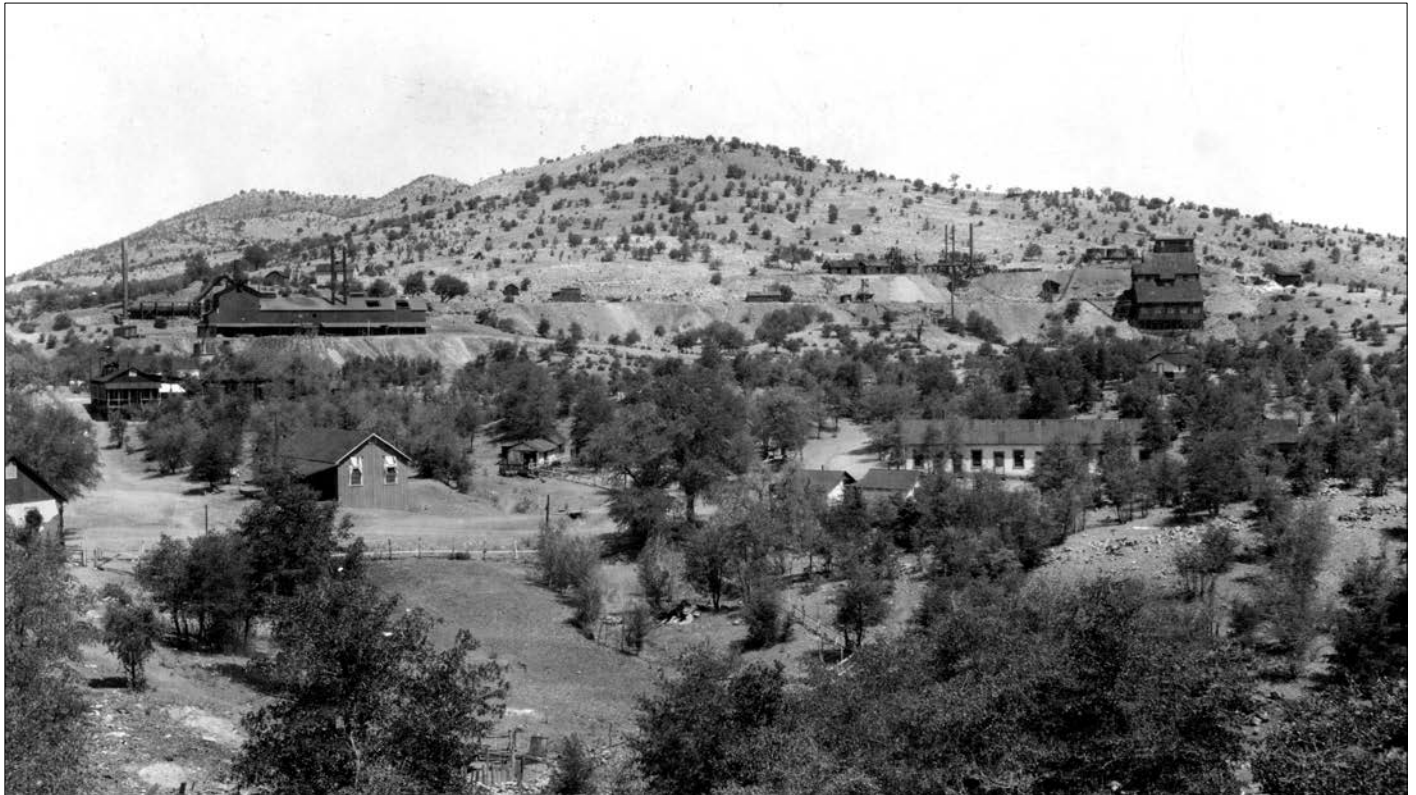
During its brief existence, Fort Buchanan played an important role in the beginnings of American mining in the Patagonia Mountains. In late 1857, Captain Richard S. Ewell, the fort's commander, was one of several officers at the fort who formed a private company to acquire a small silver mine in the mountains to the south, just six miles north of the international border. Ewell and his partners bought the mine, called the Patagonia, from a Mexican herdsman for next to nothing. They worked it with some success for a year or so, building a small furnace to smelt the ore. Ewell was sickly even before he came to Arizona, and he grew even more ill at Fort Buchanan, suffering from successive bouts of malaria. Oddly enough, the time he spent at the Patagonia mine seemed to provide some temporary relief, which he attributed to "having been around the furnace a great deal...occasionally getting a puff of vapor which is loaded with arsenic and lead." Ewell finally left Arizona in poor health in January 1861.

In 1859, Ewell and his partners sold their mine to Elias Brevoort, previously the sutler (civilian supplier) at Fort Buchanan, who soon sold it to Henry Titus, a recent settler along Sonoita Creek notorious for his earlier pro-slavery military adventures in Kansas and Nicaragua. Titus, backed by the newly formed Union Exploring and Mining Company, operated the Patagonia for only a short time, then sold it in early 1860 to Sylvester Mowry, a former U.S. Army lieutenant who was an early commander of Fort Yuma on the Colorado River. Mowry was well known both in southern Arizona and nationally for his efforts to make the Gadsden Purchase part of a proposed Arizona Territory, but by 1860 he had mostly given up that mission and devoted himself to mining. He was determined to make the most of the Patagonia mine, which he renamed the Mowry. "Patagonia" lived on as the name of the surrounding mountain range, and it later became the name of a town established along Sonoita Creek, about 10 miles north of the mine, at the end of the nineteenth century. When the Civil War broke out in April 1860, Ewell, a Virginian, became an officer in the Confederate army. By the end of the war, he was a highly ranked Confederate general.

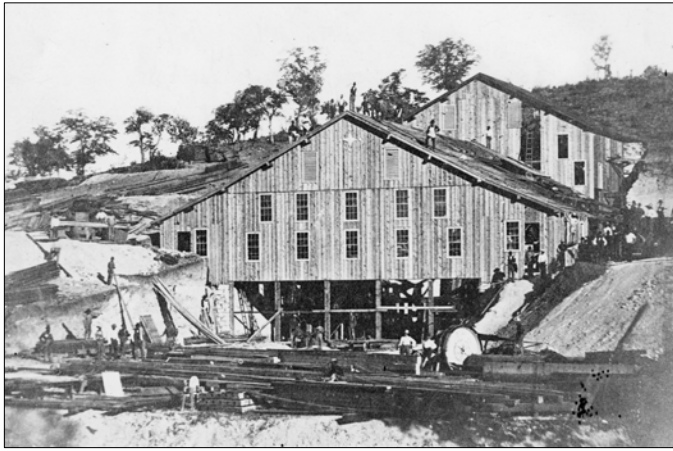
Over the next few years, 1860 to 1862, Mowry spent some \$200,000—a large sum for the time—to develop his mine and build adobe reduction furnaces

nearby. His focus was the valuable silver ore, but the mine also yielded lead, and Mowry sent bars of both silver and lead by wagon to the port at Guaymas, Sonora, Mexico, more than 250 miles away. From Guaymas, the metals were sent by ship to Europe. Despite the transportation and other costs of mining in a remote area, Mowry made a profit on his mine and employed as many as 300 men, nearly all Mexicans. The most remarkable part of Mowry's operation was his ability to keep it going at a time when most mines in southern Arizona, especially those in places as remote as the Patagonia Mountains, struggled with the constant threat of Apache raids. Mowry managed it by using many of his men as armed sentries.

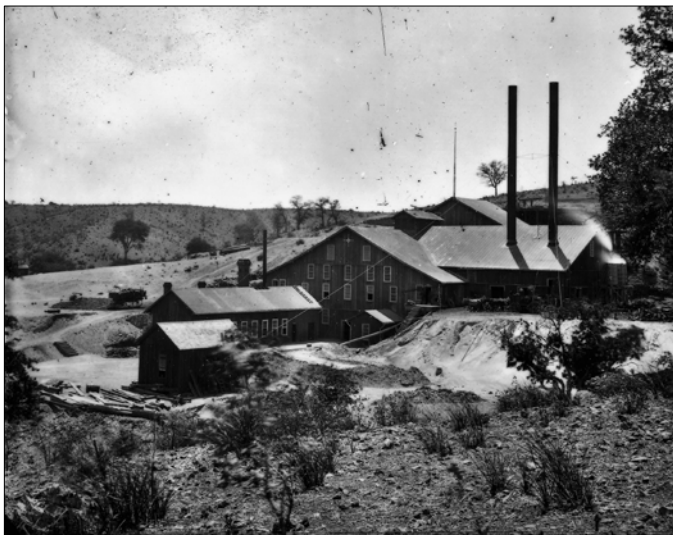
In June 1862, General Carleton, who had just captured Tucson for the Union, arrested Mowry as a Confederate sympathizer suspected of supplying lead to the enemy (for making ammunition). Mowry's mine was seized and placed under Union control, and Mowry was sent as a prisoner to Fort Yuma, where just six years earlier he had served as commander. He was released in November 1862 and allowed to continue operating his mine, but by the end of the Civil War he had sold it. Mowry went on to promote the mining potential of Arizona, most notably in a widely read book, *Arizona and Sonora: The Geography, History, and Resources of*



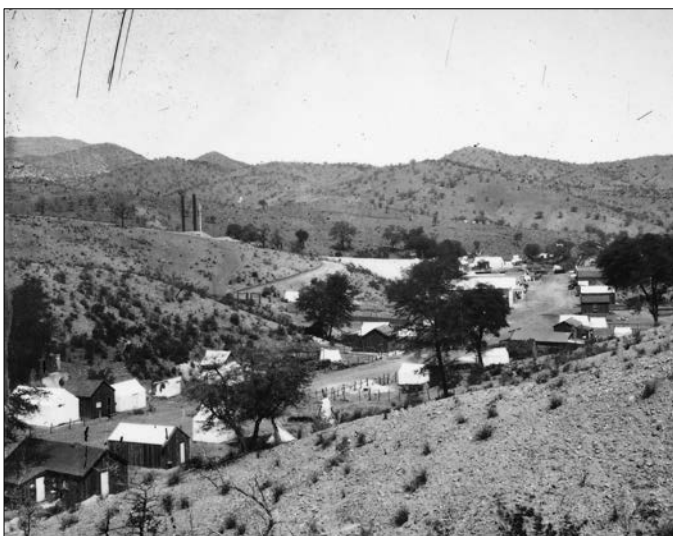
The Mowry mine and part of its camp, 1909. The smelter is at rear left, the mill is at rear right. U.S. Geological Survey Photographic Collection, Denver.



The Hermosa Mill under construction at Harshaw, 1880. Arizona Historical Society (Tucson), PC 1000, No. 28130.



The Hermosa Mill at Harshaw, ca. 1890, after various additions. Arizona Historical Society (Tucson), Buehman Collection, No. B109191.



Harshaw Camp, ca. 1890. The twin chimneys of the Hermosa mill are visible in the background. Arizona Historical Society (Tucson), Buehman Collection, No. B91701.

the Silver Region of North America (1864). He also carried out a protracted legal battle and public relations campaign against General Carleton, who he felt had done him a great injustice. But Mowry failed to convince many people that he should be compensated for his losses. He never returned to mining and died in 1871.

For the first decade or so after the Civil War, the Mowry mine was worked intermittently by claim jumpers, with limited success. In 1874, the mine was bought by two Tucson businessmen, E. N. Fish and S. Silverberg, who held it for more than a decade but did little to develop it. Then in the late 1880s the mine was sold to prominent Tucson entrepreneur Albert Steinfeld and his partners, who made substantial improvements and eventually attracted the interest of a buyer. The newly formed Mowry Mines Company bought the mine in 1904 and began developing it intensively. The mine became profitable once again, producing both silver and lead, and the company expanded its presence by patenting additional claims and exploring for new deposits. A new concentrator and smelter were built, and by 1907 some 200 men were working for the company. The previously abandoned Mowry camp became the small but busy town of Mowry, with shops, taverns, and a school. For the next two decades, the Mowry Mines Company or a subsidiary continued to operate the mine and reduction works, but by 1928 the property was largely shut down. Within a year, the Great Depression brought a drop in metal prices that all but ended mining at the Mowry, although small-time operations continued there into the 1950s. Today the former town of Mowry is a historical site holding the ruins of buildings and long-abandoned mining structures.

The Harshaw Mine

After the disruptions of the Civil War had subsided, the remaining obstacle to mining in the Patagonia Mountains was the enduring presence of the Apache, especially the Chiricahua band led by the intrepid Cochise. Southern Arizona had been the home of seminomadic Apache bands for generations, and the camps and towns of recent European arrivals were seen as logical and easy targets for raiding, an important part of the traditional Apache economy. A degree of security from Apache raids came only after the U.S. Army reached a truce with Cochise in 1873, restricting the Chiricahua band to a reservation in southeastern Arizona.

Among the prospectors to try their hand in the Patagonia Mountains in the 1870s was a New Yorker named David Tecumseh Harshaw, a relative of the famous Union general William Tecumseh Sherman. Harshaw was himself a Union man in the Civil War, having served in Arizona and New Mexico in the California

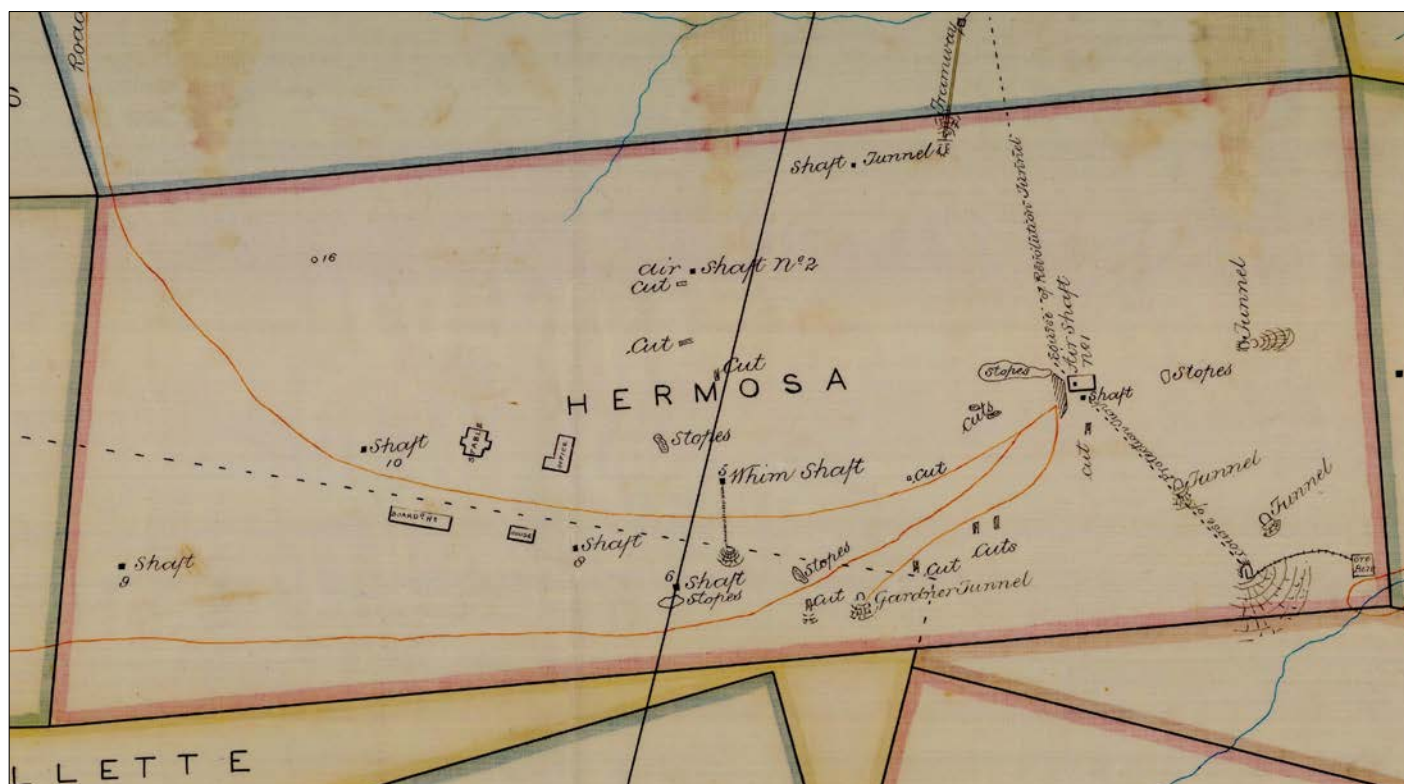
Column. He first came West as a young man in 1849 during the California Gold Rush, spent a few years in New Mexico after the end of the Civil War, and then headed to Texas to start a cattle ranch. By 1873, he had returned to southern Arizona to raise cattle in the San Pedro River valley, where he reportedly grazed a thousand head or more.

But Harshaw soon turned to mining again, first in the placer gold deposits of the Santa Rita Mountains, and then in the Patagonia Mountains, where he and a partner, José Andrade, found a surface vein of silver near the old Trench mine, first worked by Henry Titus in 1859. After several months near the Trench, Harshaw and Andrade moved to another location nearby that became the Alta mine. There they found a silver ore that, reduced with primitive methods, could be shipped profitably to San Francisco, either by sea via Guaymas or overland by mule train. Harshaw also filed several new claims in the vicinity, most notably on mines he dubbed the Harshaw and the Hardshell. He worked both mines just long enough to prove they were worthwhile, then sold them to outside investors in 1879. Then he left the Patagonia Mountains and mining altogether, married Andrade's sister, and bought into the Andrade ranch and stage stop at Davidson Springs, near the northern end of the Empire Mountains, some 35 miles away. He died there in 1884.

Harshaw never returned to the Patagonias, but the silver mine he discovered retained his name, a name also given to the town that soon grew up around it. A large Eastern interest, the Hermosa Mining Company, had bought the mine and quickly built a 20-stamp mill to process the ore extracted by a crew of 150 men, working underground in seven shafts. By 1880, the Hermosa mill was handling 75 tons of ore per day, and the town had 600 inhabitants from seven countries, including a full complement of tradesmen, businessmen, and professionals, many with their families.

Also in 1880, the Southern Pacific railroad was completed across southern Arizona, which made it possible to ship milled ore by wagon directly to the rail station at Pantano, just east of modern Vail, about 40 miles away. Soon a collection of some 200 buildings was standing in Harshaw, including shops, saloons, a livery stable, a newspaper, a school, and several well-appointed houses.

Despite the evident prosperity, the Hermosa operation was faltering by late 1881 as the silver in the Harshaw and other company mines in the vicinity began to play out. By early 1882, the company had shut down both the mining operation and the mill and moved its investment to a more-profitable mine in Sonora. Hermosa held onto the property for several



Detail from *Map of Mining Claims, Property of the Harshaw Mining Company, Pima County, Arizona*, by George J. Roskruege (1881). Arizona Historical Society (Tucson), Maps.



Students and their teacher at the Harshaw school, ca. 1880. Arizona Historical Society (Tucson), PC 1000, No. 26542.

<p>L. C. MCBAIN. La Noria, A. T.</p>	<p>CHARLES KRESHAM. Harshaw, Durazno, A. T.</p>
<h2 style="margin: 0;">KRESHAM Y MCBAIN</h2> <h3 style="margin: 0;">COMERCIANTES POR MAYOR y Menor</h3>	
<p style="font-size: small;">Tenemos la honra de poner en conocimiento de los habitantes de Sonora y Sur de Arizona, que acabamos de establecernos en el Durazno y la Noria, con un</p>	
<h3 style="margin: 0;">MAGNIFICO SURTIDO DE EFECTOS</h3>	
<p style="font-size: small;">El cual ofrecemos vender a precios de Tucson. Nuestro surtido completo, los efectos todos nuevos y cuidadosamente escogidos para el comercio de ambas fronteras.</p>	
<h2 style="margin: 0;">50 PESOS DE ORO</h2>	
<p style="font-size: small;">Pagaremos por su viaje a todos los que se dirijan al lugar de nuestra residencia con objeto de compra nos, y no encuentren nuestros precios al igual de Tucson.</p>	
<h3 style="margin: 0;">Venid Pues a Comprarnos.</h3>	

In the early 1880s, Tucson merchants Charles Kresham and L. C. McBain opened stores in the mining communities of Durazno and La Noria, in the Harshaw mining district. Most of the residents in both towns were Mexican, so Kresham and McBain advertised in a Spanish-language Tucson newspaper with a wide circulation. *El Fronterizo* (Tucson), January 27, 1882.

more years but never returned to reopen the mine or the mill. In 1885, the mill was sold to another company and dismantled for use elsewhere in southern Arizona. And in 1887 the mine was sold to James Finley, a Tucson businessman. Meanwhile, much of the population of Harshaw moved away. Finley eventually built a new mill and began mining and processing ore, with limited success. In 1893, he leased the mine to a company that remodeled the mill and began developing new areas of the principal mine, only to go broke before producing any ore. Also in 1893, silver was demonetized by the federal government, which caused a crippling drop in silver prices and brought an end to Arizona's days as a major silver producer. Ten years later, Finley died, the Harshaw post office closed, and the town was largely abandoned. Attempts to revive the mine in 1908 and 1949 were short-lived and unsuccessful.

Mining Districts of the Patagonias

The Patagonia (later Mowry) mine was notable for how early it was developed, the first American mine in the Patagonia Mountains. The Harshaw mine, first worked 20 years after the Patagonia, was notable for the size of its mining and milling operation, and for the sizable town that sprang into existence nearby, only to fade away after a few prime years. The importance of the two mines in

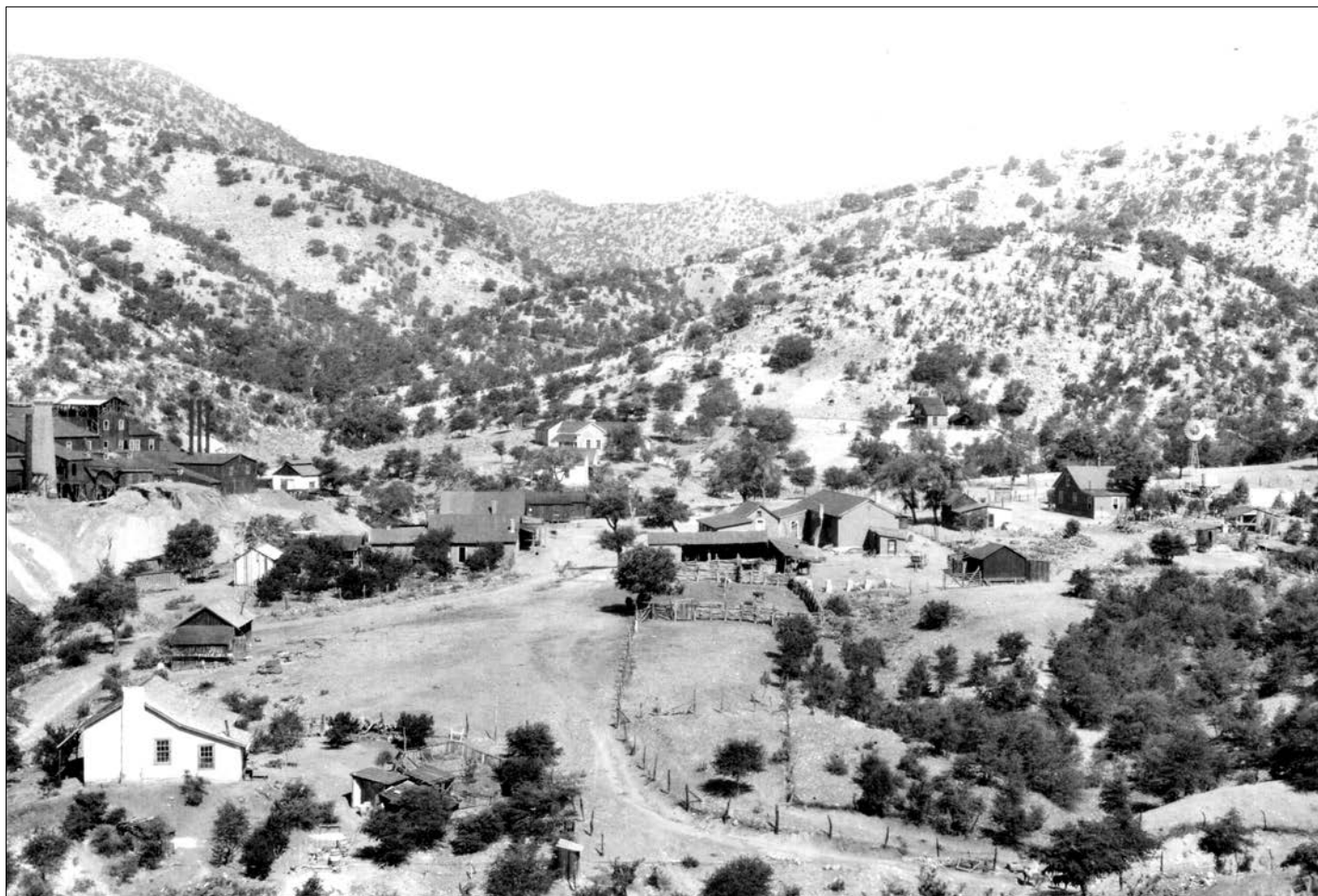
the history of the Patagonia Mountains is evident in the use of their names for the two principal mining districts in the region. The Patagonia district was organized around 1875 and takes in most of the southern portion of the mountain range, an area roughly eight miles north-south by 12 miles east-west, its southern limit marked by the international border. The Harshaw district was organized a few years later and takes in most of the northern portion of the Patagonia Mountains, an area roughly nine miles north-south by five miles east-west, extending south from the town of Patagonia to a few miles south of the Harshaw mine.

Mining districts were organized by the earliest prospectors in a region in order to define an area of mining interest and to set the rules that all future miners in the district would follow. The districts were first established informally but were later codified by the General Mining Act of 1872. The Patagonia and Harshaw districts were flanked by two other districts, the Redrock and Palmetto, but neither district took in nearly as much of the Patagonia Mountains or were nearly as productive.

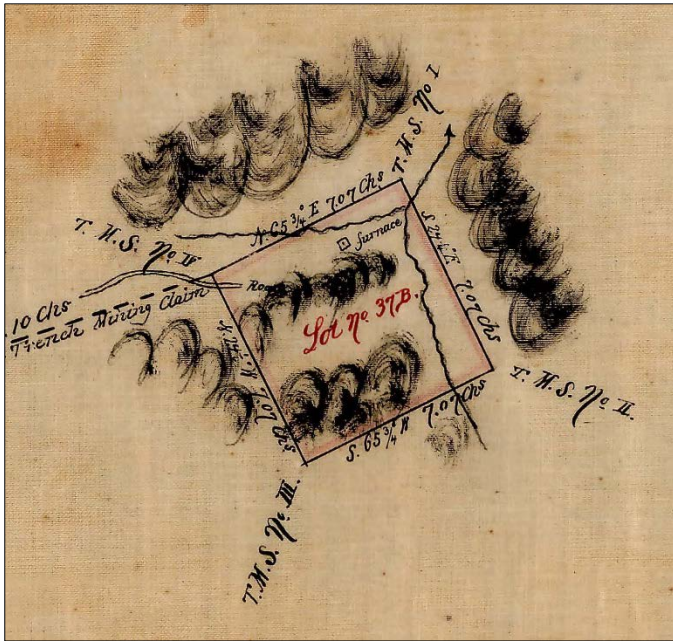
In the Patagonia district, the Patagonia (later Mowry) was the oldest and best-known mine and camp,

but another important location was in the southeastern part of the district, a few miles north of the international border. There Washington Camp took shape in the late 1870s in support of several nearby silver mines, including the Washington (later Pride of the West), Bonanza, Belmont, Empire, and San Antonio mines. After 1890, a second camp, Duquesne, named for the Duquesne Mining Company, arose just a mile or so from Washington Camp and assumed the earlier camp's importance. Mills were built in both camps at different times, and both camps held the various businesses and services in demand in a mining community—saloons, stores, boarding houses, stables—as well as houses and tents. The Duquesne Mining Company was one of the first companies to extract and mill copper ore in the district, as the value of silver declined steeply after 1883. Both Washington and Duquesne camps were largely abandoned by the early twentieth century.

In the Harshaw district, the namesake Harshaw mine was the best-known mine with the largest camp, but other, smaller camps in the late nineteenth and early twentieth centuries were associated with the Hardshell, World's Fair, Flux, Standard, and Thunder



Washington Camp, 1909. U.S. Geological Survey Photographic Collection, Denver.



Miners filed claims with the federal government to ensure their right to mine in particular locations, but they also filed claims for mill sites, locations where they might build an ore mill or a smelting furnace. This 1873 plat is for the 5-acre Trench mill site claim. General Land Office Records, Bureau of Land Management, Washington, D.C.

mines, all of which produced primarily silver and lead in their earlier years but were later of interest for their copper deposits. An example of a mine in the Harshaw district that became important for copper in the late nineteenth century is the World's Fair mine, about two miles west of Harshaw. By 1909, it was the deepest mine in the district, with a main shaft 600 feet deep and some 15,000 feet of drifts, stopes, shafts, and winzes (all are specific kinds of underground excavation). Like the other copper mines in both the Harshaw and Patagonia districts, the owner of the World's Fair, Frank Powers, processed his ore on site with a mill he had built, but he then shipped the concentrate to a smelter outside the district, in his case to Douglas, Arizona.

The Trench Mine

Another notable mine in the Harshaw district, about a mile and a half west of Harshaw Camp, was the Trench, one of the earliest and most enduring mines in the Patagonia Mountains. The origin of the Trench name is uncertain, but it was probably a simple description of the early workings there—an open trench rather than a shaft. Early in its history, the Trench mine was sometimes called the French mine, perhaps based on a misreading of Trench in handwritten documents of the period. The earliest references to the Trench are from 1859, when Henry Titus, one of the early owners of the Patagonia mine, briefly mined silver there before deciding to

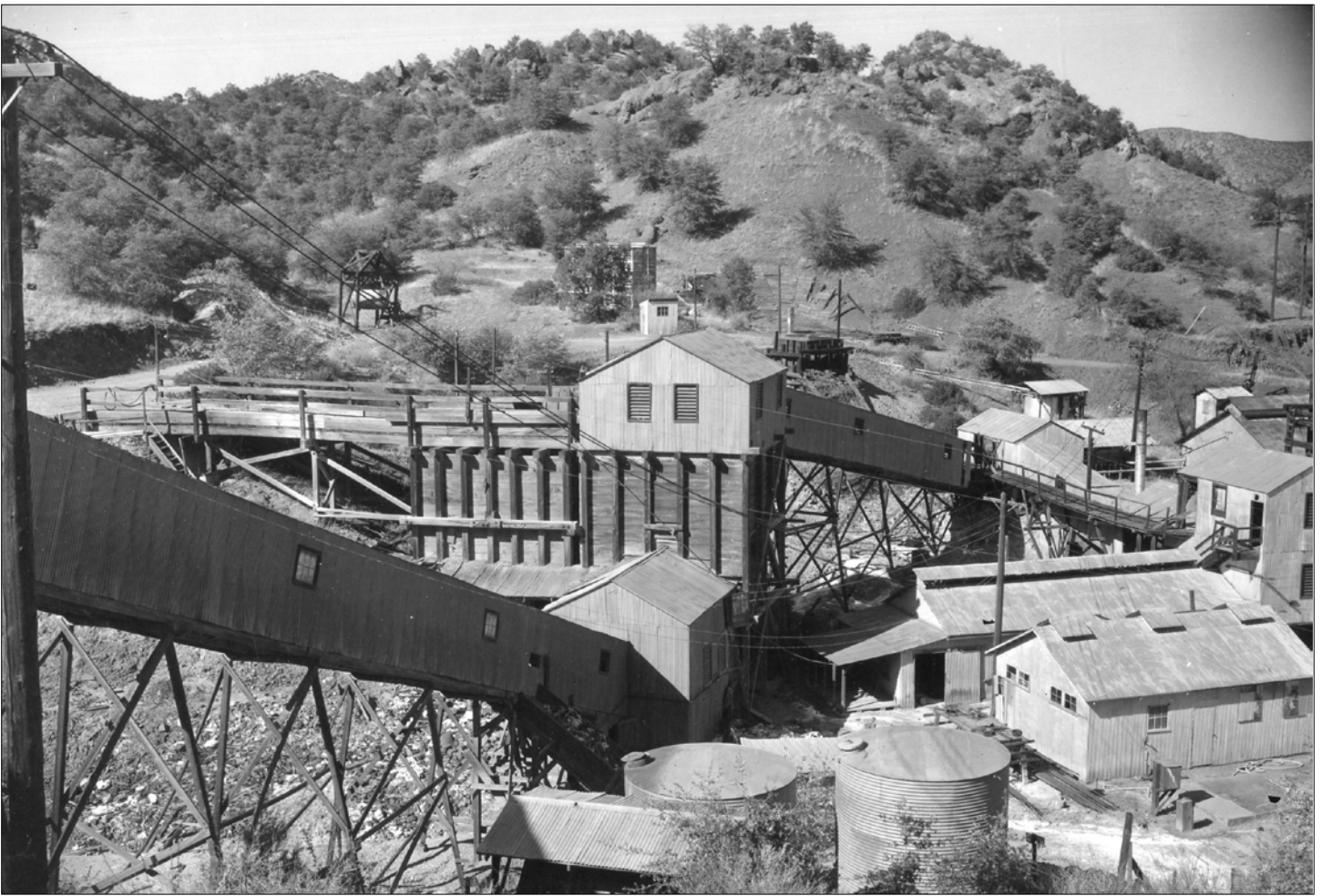
THE CITIZEN.

SATURDAY, - - November 15, 1873.

The "Trench" Mine.

This mine will probably soon figure as a paying one and therefore its location and ownership may as well be stated now. It is on the north slope of the Patagonia mountain near the Sonora line in Pima county, and is owned by J. C. Hopkins, Dr. J. C. Handy, Lieut. S. O'Connor, R. N. Leatherwood and Thomas Gardner. It contains per ton as per assays, \$1 50 gold; \$202 68 silver; 47½ per cent. lead; 2 24 per cent. iron, and some sulphur. Dr. Handy informs us that there is just iron enough in it to neutralize the sulphur and that the ore smelts easily. Not long ago, an experienced smelter worked some of the ore, and from the best information the proprietors can obtain, the product of silver was much larger than stated above. The owners now have miners at work, and will soon have the product of several tons with as much precision as it is possible to obtain with the ordinary furnace. If the yield meets something near expectations, better means of reduction will be procured and regular mining operations be conducted on an enlarged scale. Judged from information obtained by experiments with the ore of the "Trench" mine, it can hardly fail to prove very valuable.

In the early 1870s, the Trench mine was of interest to Tucson both for its economic potential and for its ownership, which included several local dignitaries. One Tucson owner not mentioned here was the territorial governor, Anson P. K. Safford. *Arizona Weekly Citizen* (Tucson), November 15, 1873.



The reduction works at Trench Camp, 1964. Arizona Historical Society (Tucson), PC 1000, No. 53649.

leave Arizona for adventures elsewhere. The Trench is also one of the mines in the Patagonia Mountains reportedly worked as early as the eighteenth century by Spanish Jesuits, but these reports are difficult to evaluate.

After Titus left Arizona, the Trench mine was not worked regularly again until the early 1870s. In 1872, a group of prominent Tucson citizens including the governor of Arizona Territory, Anson P. K. Safford, began work at the Trench, extracting silver ore that they smelted in two adobe blast furnaces built nearby. By 1873, they had patented the Trench claim and were shipping silver bullion to San Francisco. The Trench proved to be a productive mine for a succession of owners over the next decade, and other mines in the vicinity would bring ore to its furnaces for smelting. A similar situation would prevail at the Trench many years later when a mill built there became the destination for ore taken from other mines in the Harshaw district.

Despite its recognized potential, or maybe because of it, the Trench was bought and sold numerous times in the late nineteenth century. Its various owners included the Hearst estate of California, whose operators made the first deep excavation at the

mine, a shaft reaching down 400 feet. By 1889, high-grade silver ore was being carried by wagon from the Trench to a new smelter at Crittenden Station.

By 1915, after again changing hands numerous times, the Trench was bought by United Verde, one of several large mining companies that began buying up promising mines in the Harshaw and Patagonia districts. Interest in the mines was prompted by anticipation of a heightened demand for silver, lead, zinc, and other metals as Europe headed toward the First World War. But when the war ended in 1919, metal prices went into a long slump and many mines in the districts closed, including the Trench. A minor silver boom in 1925 prompted a brief reopening of some mines, but the boom was quickly forgotten when the Great Depression hit at the end of the decade.

In 1938, the Trench became productive once again when it was bought by the American Smelting and Refining Company (ASARCO). The new owner built a modern reduction works (mill) and smelter at a camp near the Trench for processing the silver and lead ores extracted from the mine. Other mines also brought ore there for processing, a practice that continued until the late 1960s when the mine and mill closed permanently.

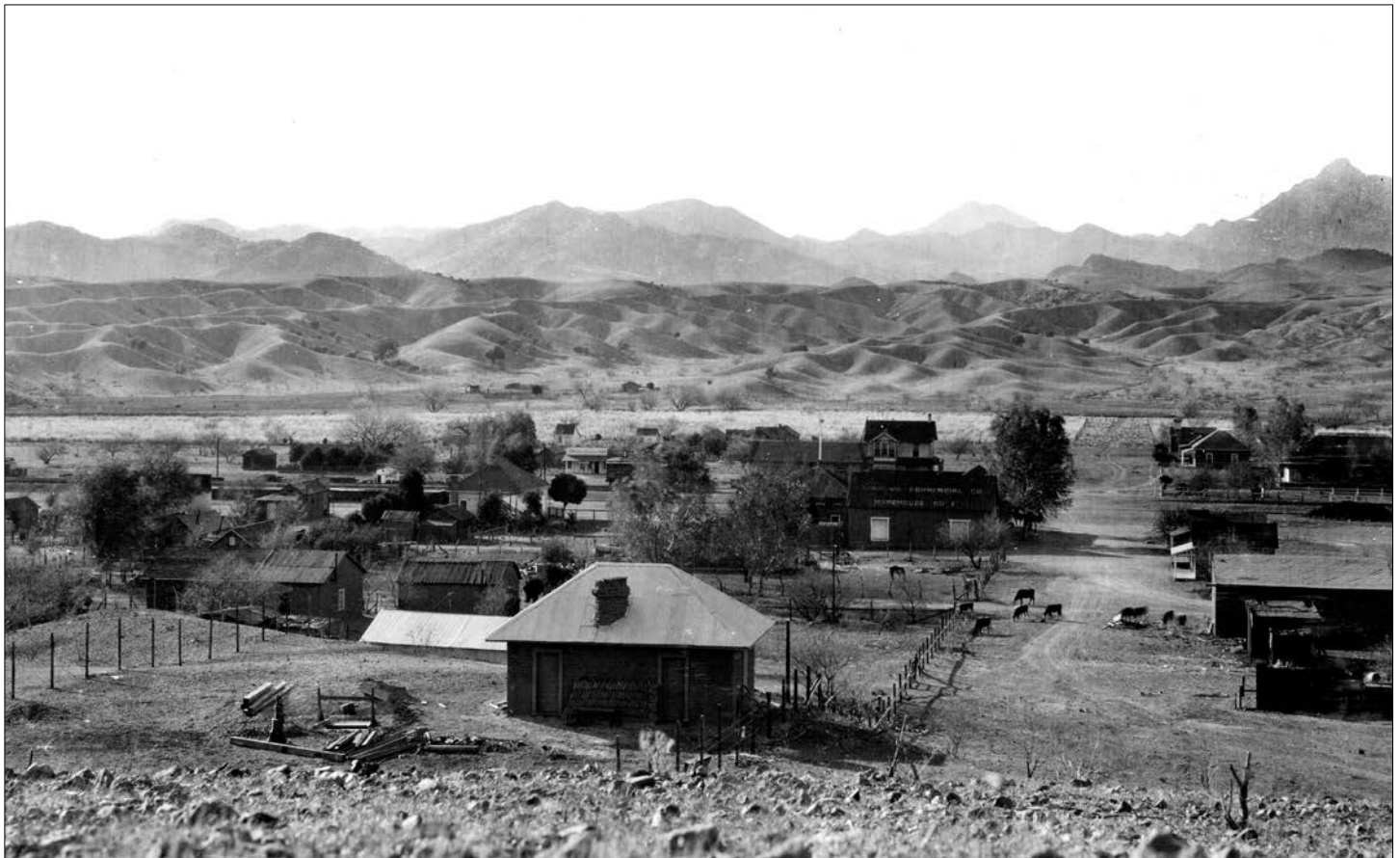
R. R. Richardson and Patagonia

In 1882, the New Mexico and Arizona railroad was completed from Nogales to Benson, passing through the Sonoita Creek valley and giving mining operations in the Patagonia Mountains a railroad connection much closer than the Southern Pacific at Pantano. Initially, the New Mexico and Arizona station nearest to the mines was Crittenden, a townsite newly created by the railroad and named for long-abandoned Camp Crittenden but located about six miles downstream. For the next 18 years, Crittenden was the shipping point for area mines as well as a small commercial center, and a smelter was built there soon after the station opened. Crittenden was not, however, conveniently sited. It sat at the top of a steep grade, which made access difficult for heavy loads and in wet conditions.

The station at Crittenden was abandoned in 1900, when another station opened three miles down the creek at the site of the modern town of Patagonia. The new station was a coup for R. R. Richardson, the man who first platted a townsite there in 1887, giving it his own first name, Rollin. By 1900, Richardson had sold enough lots and settled enough people to qualify the town for a post office, but the town name Rollin was dropped and the



Rollin Rice Richardson, ca. 1900. Arizona Historical Society (Tucson), PC 1000, No. 78523.



The town of Patagonia in 1909, view toward the north. U.S. Geological Survey Photographic Collection, Denver.

post office was officially named Patagonia, after the mountain range. Patagonia replaced Crittenden as the commercial center and transportation hub for mining operations in the nearby mountains.

Richardson was a Pennsylvania native who came to southern Arizona in 1880 as a young man, hoping to make a living (and then some) in ranching and mining. He had no experience in either field, but he had some capital to work with and was soon buying parcels of land along a prime stretch of Sonoita Creek, assembling them to form a large cattle ranch that he named the Pennsylvania. It was headquartered a few miles below old Camp Crittenden. After buying additional land farther downstream and platting the Rollin townsite, he moved his headquarters there and began doing business as the Crittenden Land and Cattle Company. By 1885, Richardson was also heavily involved in mining in the Patagonia Mountains, staking numerous claims, buying others, and working at least some with success, notably several copper mines along Harshaw Creek, including the Mother Lode and the Three R (or RRR, his initials). In 1880, the year he arrived in Arizona, Richardson bought the Hardshell, one of the mines first worked by Harshaw and Andrade and located about a mile from Harshaw Camp. Richardson worked the

Hardshell himself with some success and later leased it to others who greatly expanded the workings.

After 1900, Richardson leased land in his townsite for smelters and other businesses that supported mining. The first smelter in Patagonia was built by the Empire Mining and Milling Company, which was also leasing the Hardshell mine from Richardson at the time. Richardson was a shrewd and sometimes ruthless competitor when it came to business of any kind, and he was often feuding with fellow ranchers, miners, and other locals, including Frank Powers, the Irishman who owned and operated the World's Fair and other mines in the Harshaw district. To thwart Powers, Richardson once filed two mining claims just to block a road used by Powers to haul ore to the smelters. He named one claim the Irish Lord, an insult to Powers, and the other the Dago Queen, an insult to Powers' Italian wife.

In 1901, Richardson sold most of his ranch lands to Walter Vail of the Empire Ranch, which was headquartered near Sonoita and one of the largest ranches in southern Arizona. But he kept his mines, which provided him with a steady income. After the rail station was moved to Patagonia, Richardson opened a general merchandise store there called the Patagonia Commercial Company, the largest business in town for many years. Richardson died in 1923, around the same time that the national economy was experiencing a post-World War slump. Some mines in the Patagonia Mountains closed; others remained active, but only at a minimal level. The situation worsened in 1929 with the stock market crash that marked the beginning of the



Frank Powers, owner of the World's Fair mine in the Harshaw district, and sometime adversary of R. R. Richardson. Arizona Historical Society (Tucson), PC 1000, No. 7153.



Newspaper advertisement for R. R. Richardson's general merchandise store in Patagonia. *Santa Cruz Patagonian* (Patagonia), August 6, 1915.

Great Depression. The New Mexico and Arizona Railroad, struggling to stay profitable, abandoned the portion of its line between Nogales and Patagonia.

It was not until 1938 that the outlook improved when ASARCO took over the Hardshell, Trench, and Flux mines in the Harshaw district, with ambitious plans to develop extensive new areas for mining. With the start of World War II, ASARCO was ready to meet the sudden demand for the metals found in abundance in the Patagonia Mountains, notably copper, lead, zinc, and molybdenum. The town of Patagonia prospered accordingly, and the wartime demand for metals

continued for a decade or so after the war had ended. ASARCO eventually shut down its Patagonia operations in the late 1960s, but the town suffered a serious blow even earlier. In 1962, the New Mexico and Arizona Railroad abandoned and removed the rest of its line, leaving the town without a rail connection to the rest of southern Arizona. Nevertheless, Patagonia today is still a thriving community, in part because of its location along State Route 82, the modern version of the old road that long followed Sonoita Creek. The town also continues to be a commercial center for mining, ranching, and other businesses in the area.

Suggested Readings

Constance Wynn Altshuler, "The Case of Sylvester Mowry: The Mowry Mine," *Arizona and the West*, Vol. 15, No. 2 (Summer, 1973), pp. 149–174.

J. Ross Browne, *Adventures in the Apache Country, 1864*. Reprinted. University of Arizona Press, Tucson (1974).

Antonio Rafael de la Cova, "Arizona Silver Miner, 1858–1860," Chapter 4 of *Colonel Henry Theodore Titus: Antebellum Soldier of Fortune and Florida Pioneer*. University of South Carolina Press, Columbia (2016).

Bob Cunningham, "A Pennsylvanian in Patagonia: The Arizona Career of Rollin Rice Richardson," *Journal of Arizona History*, Vol. 35, No. 1 (Spring, 1994), pp. 47–62.

Douglas E. Kupel, "Patagonia: Jewel of the Sonoita Valley," *Journal of Arizona History*, Vol. 36, No. 1 (Spring, 1995), pp. 55–82.

Robert Lenon, "The Patagonia Area Mining Districts, Santa Cruz County, Arizona, 1539–1930," in *History of Mining in Arizona, Volume III*, edited by J. Michael Canty, H. Mason Coggin, and Michael N. Greeley, pp. 53–82. Mining Foundation of the Southwest, Tucson, Arizona (1998).

Sylvester Mowry, *Arizona and Sonora: The Geography, History, and Resources of the Silver Region of North America*. Harper and Brothers, New York (1864).

James E. Officer, "Mining in Hispanic Arizona: Myth and Reality," in *History of Mining in Arizona, Volume II*, edited by J. Michael Canty and Michael N. Greeley, pp. 1–30. Mining Club of the Southwest Foundation, Tucson, Arizona (1991).

Frank C. Schrader, *Mineral Deposits of the Santa Rita and Patagonia Mountains, Arizona*. U.S. Geological Survey Bulletin 582. Government Printing Office, Washington D.C. (1915).

Georgia Wehrman, "Harshaw: Mining Camp of the Patagonias," *Journal of Arizona History*, Vol. 6, No. 1 (Spring, 1965), pp. 21–36.

Front cover: The town of Patagonia was established in the late nineteenth century along the recently completed New Mexico and Arizona railroad. It has been a transportation and supply hub for mines in the Patagonia Mountains ever since. It has also been a logical place to advertise this important mining region. In the early twentieth century, town boosters set up stands along the highway, displaying samples of the ores from local mines to pique the interest of visitors and passersby. Photograph of Albert Gross by unidentified photographer, ca. 1920, courtesy of the Patagonia Museum.

Rear cover: A portion of the 1905 U.S. Geological Survey topographic map of the Nogales 30-minute quadrangle, showing places in the Patagonia Mountains. Mines, mining camps, and the roads connecting them dominated the mountainous landscape of the period.



PATAGONIA MOUNTAINS

Guajolote Flat

Harrison's Ranch

GOLDEN ROSE MINE

MOMARAS MINE

Sycamore Canyon

HOLLAND MINE
BELMONT MINE

Finley and Adams Canyon

San Antonio Canyon

Washington
Duquesne

BM 5496

BM 5394

B.M. 5241

BM 4653

Saddle Mtn
25000

Goldbaum Canyon

Corral Canyon

Willow Spring Canyon

THE MOWRY MINE

Mowry

American Pk

Hermoso Hill

Hardshell

Harshaw

Harrison's