

# Chapter 4

## THE OLD DOMINION COPPER MINE

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In the same year that the United States of America was celebrating its one hundredth birthday, a silver mining camp was established along Pinal Creek near the mouth of Alice Gulch in east central Arizona. For a dozen years or more, prospectors had been roaming this area in search of “color.” By the mid-1870s, several claims were being worked and some were beginning to produce some high grade silver ore. The new settlement, called Globe City, became the commercial and social center for the prospectors and miners of the Globe Mining District.

Within six years the silver lodes began to play out and Globe, as the town was now called, seemed destined to the fate of so many other western mining camps. But silver wasn’t the only metal found in the hills and canyons around Globe. Some of the earliest miners came across copper ore, but this was initially ignored as silver was easier to mine, process and transport, and brought a far better price.

### The Early Years

In 1878 the first copper mine in the Globe district was established in Big Johnny Gulch not far from the area’s first silver claims. In the same year, M. H. Simpson acquired three claims—the Chicago, New York and Keystone—near Bloody Tanks about six miles west of Globe. Two years later Simpson incorporated the Old Dominion Mining Company of Baltimore. Within a few months, the company installed a pair of thirty-ton water jacket furnaces to smelt the ore from the near-by claims. The operation lasted only a few months, however, as transportation costs were prohibitive and the yield of copper was below expectations.<sup>1</sup>

Meanwhile at Globe, the Old Globe Copper Company began to mine copper ore and smelted it in a furnace at Alice Gulch. The Old Dominion Copper Company of Baltimore, having failed at Bloody Tanks, and still in possession of plenty of eastern money, purchased the Old Globe holdings in 1882. The two furnaces at Bloody Tanks were moved to the Globe site. With three furnaces avail-

able, smelter foreman, John J. Williams, was ready to process any ore that came his way. The only adit to the underground workings was the Mooney tunnel which surfaced on the bank of Pinal Creek. This tunnel provided access to the mine for the workers and for the mules who hauled out the copper ore.<sup>2</sup>

The combined Old Dominion-Old Globe Company was re-incorporated as the Old Dominion Copper Mining Company. For the next fifty years the Old Dominion was the barometer of Globe’s economy and well-being.

The company ran on a financial roller coaster for the next twenty years. Just a few months after its organization, the mine and smelter were shut down briefly. In 1883 the price of copper dropped, and the next year there was a “mild depression.” Much of the company’s money woes was due to the high cost of transportation of coke for the furnaces, some of which came from as far away as Cardiff, Wales.

Alexander Tripple arrived in August of 1884 to be the superintendent of the mine. He immediately made plans for some needed improvements in operations. A one thousand foot tunnel was dug to connect the Old Dominion and Old Globe underground workings, and a two-hundred ton bin was constructed for the stockpiling of coke. By January of the next year, however, Tripple announced that there would be a reduction in work force and in wages. The miners protested, and eventually a negotiated settlement averted a walkout. The Old Dominion closed again in 1886 because of depressed copper prices. By this time, though, some 22,800,000 pounds of copper had been extracted from the fabulous mine.

A. L. Walker came to Globe in 1888 to replace Alexander Tripple. Walker had more new ideas on handling the copper ore. He built a 1,224 foot long aerial tramway with eleven buckets to carry ore from shafts on the hill to the ore bins near the smelter. In addition, the Interloper shaft was sunk into rich lodes some distance from the original ore bodies. Unfortunately, these moves did little to

improve the financial situation, as prices again declined and the mine was shut down for six months the following year.

By the beginning of the new decade, business was picking up at the Old Dominion, and when the mine was doing well, Globe was thriving. By 1891, the community was experiencing a building boom. New homes were being erected, businesses were moving in and the population exploded. Globe's citizens were enjoying some of the good times of the "Gay Nineties." In January of 1892, a new 185 ton furnace was blown in at the old Dominion smelter. Ore from the mine was testing at 11 to 12 percent copper.

The mood of Globe was tempered in February 1891 by a violent and destructive flood of Pinal Creek. Several buildings in downtown Globe were severely damaged, the wood yard at the Old Dominion was washed downstream, and William Middleton drowned when he slipped on a muddy bank and plunged into the raging torrent.

The "panic" of 1893 was another setback for the Old Dominion Mine and the community. But good news came the next January when the Gila Valley, Globe and Northern Railroad began construction of a rail line from the Southern Pacific Railroad mainline at Bowie to Globe. Little did they know then that it would take nearly five years for the track to reach Globe.<sup>3</sup> In March, the Old Dominion announced that the mine would be shut down as soon as the coke supply was used up.

In May 1894, the people of Globe learned that the Old Dominion had been purchased by the Lewisson Brothers brokerage firm of New York City. The furnaces were renovated and blown in the next year. The mine was back in business with another new name, The Old Dominion Copper Mining and Smelting Company.

Water in one form or another had been a problem for the mine for several years. Two years after the lumber supply went tumbling down the creek, another flood did more damage. In 1897, operations came to a halt during several days of torrential rains. In December of the following year, the outbound train became stranded in a snow bank east of Globe. The mine was unable to make shipments or receive supplies for several days. In 1899, a new and persistent problem beset the mine when water seeped into the lower levels. Drilling and mucking were put on hold until pumps could be installed.

The arrival of the iron rails in late November 1898 marked the start of a new era for the old Dominion Mine. The company had been stockpiling copper for some time in anticipation of lower freighting costs on the railroad. In January 1, 120,000 pounds of copper were loaded onto railroad cars for shipment to the company's waiting customers. The railroad would be the solution to the long-standing transportation problems and good times were anticipated for the mines and businesses of the area.

## The Boom Years

The twentieth century brought with it a period of "relative stability and a promise of prosperity." In 1901, the shareholders of the Old Dominion Copper Mining and Smelting Company voted to take over control of the mine. They hired engineers from Tanganyika to survey and evaluate the property, and upon receiving a favorable report, decided to enlarge and modernize the physical plant.

In 1904, the Old Dominion Company was incorporated with James Douglas as its president. This corporation was a holding company which operated the mine while the Phelps Dodge Company controlled the stock. Phelps Dodge and James Douglas had been involved with the nearby United Globe Company since 1893, and a cooperative working relationship existed between the two companies. Dr. Louis D. Ricketts became general manager of the Old Dominion Mine, and Charles Smith became its president, a position he held for nearly twenty-five years.

Ricketts was a capable mining engineer who had worked for Phelps Dodge at several other locations. He was a pioneer in the development of conveyors and aerial tramways, and in the design and construction of large, efficient concentrating mills. He came to Globe with new plans and ideas for the Old Dominion Mine.

From 1904 through 1908, the company spent about \$2,500,000 on the expansion and modernization of the Old Dominion's facility. Soon after the project got underway, the old smelter had an explosion in the Number 2 furnace. Three men were thrown into the air but were not seriously injured. The smelter was shut down the next month.

Four new furnaces in a new smelter building were blown in during September 1904, and two months later, the furnaces put out some two million pounds of copper. After two more furnaces were added, the smelter was running regularly at its capacity of three million pounds of copper per month.

From the very beginning, the Old Dominion smelter processed ore from a number of neighboring mines. The Black Warrior Mine in Lost Gulch was sending large shipments of ore before the turn of the century. The Inspiration and Gibson mines hauled their ore in mule-drawn wagons, and ore from the mines at Copper Hill was hauled in wagons to the head of the aerial tramway. In 1906, a railroad from Copper Hill replaced the wagons and tram.

While the new smelter was under construction, work was also started on a large modern concentrating plant, a new power house, and a new shaft and hoist house. By 1908, the Old Dominion Mine's physical plant and operations were among the finest in the world.

Shortly after the Gila Valley, Globe and Northern Railroad reached Globe in 1898, the tracks were extended to the Buffalo smelter of the United Globe Copper Company. A few hundred yards from the terminal, spurs were built to service the Old Dominion smelter. Those lines were on the banks of Pinal Creek, and more than once the rails were torn and twisted, and the railroad bed washed away by violent floods.

In 1903 and 1904, as part of the revamping of the Old Dominion Mine, a new high line was constructed from North Globe to the site of the new smelter. Sidings, switchbacks and spurs were added to provide rail access to the concentrator, power house, ore bins and other facilities on the property. Eventually the industrial railroad totaled over six miles in length. The first rolling stock on the railroad, consisting of a Shay "dinky" and six ore cars, was purchased in 1903, and new equipment was added as the need arose.

The statement "As goes the Old Dominion, so goes Globe," was never more true than in those years of mine expansion. Houses were going up all over town, established businesses were thriving, and new buildings were crowding onto Broad Street. Many of Globe's present historic structures were built between 1904 and 1910. Money was plentiful, spirits were high, and the future was promising. This was Globe's heyday!

The exuberance of Globe's residents was dampened by two disastrous events during those boom years. In the summer of 1904, Pinal Creek again overflowed its banks. Six people drowned in the floodwaters, many buildings in Globe were damaged or demolished, and a section of the railroad was washed out near the Old Dominion Mine. A year

and a half later a fire broke out in the Old Dominion's Interloper shaft. Within thirty minutes after the alarm sounded, the shaft was safely cleared of workers. Five men volunteered to go back down with a fire hose to extinguish the blaze, but a shift in air movement brought thick smoke into the shaft, and three of the men died of asphyxiation.<sup>4</sup>

Accidents were a common occurrence in the underground mines. In 1913, five men were killed by a cave-in at the Miami Copper Company. In 1917, The Old Dominion Bulletin reported that 307 injuries had occurred in a period of ten months. Almost forty percent of those were caused by falling rock and ore. In 1918, the Old Dominion Mine joined forces with the other mines in the district to form the Globe-Miami Mine Rescue and First Aid Association. Under the direction of Safety Engineer Orr Woodburn, the association provided training in first-aid and rescue work, and provided equipment and expertise in rescue operations and disaster management.<sup>5</sup>

After the first problem with water in 1899, the underground pumps fought a continuing battle with water in the mine. In 1909, new steam-powered pumps were installed and daily pumping levels reached five million gallons in 1912. On March 26, 1915, heavy rains in the mountains caused an increased flow of water into the tunnels. The overheated pumps removed 14,500,000 gallons of water that day before the pumps gave out. Mining operations were suspended for five weeks while the mine was allowed to dry out.

From 1912 through 1917, increased demand for copper and continued discovery of high-grade copper ore prompted the company to further expand the Old Dominion plant. A new crusher was constructed, the concentrating mill was enlarged, and large new ore bins were built. Other new structures included a filter plant, a sample mill, a saw mill and a three-stall garage for the company's new automobiles.

There was a drop in copper prices in 1910, but by 1916 the war in Europe caused an increased demand for copper, and prices soared. Many of the young miners left to fight for their country in World War I, while a few others, nationals from Eastern Europe, returned home and took up arms for their native countries.

While the war was being fought in Europe, a minor skirmish was fought half-way around the world in Globe, Arizona. When Austria declared war on

Serbia in July of 1914, nationals from each country mixed it up at the International Saloon on Broad Street. It was mostly a war of words that evening, but eleven days later that same band of men engaged in a second melee at the saloon. The ruckus attracted a large crowd of Globe's citizens who watched the two factions fight it out with fists, beer bottles, and billiard cues. The premises were left in shambles, and fifteen men spent the night in the local calaboose.

## Strike, 1917

Copper strikes in 1917 spread from Arizona to Montana. The demand for copper was high during the war and profits were soaring. The hard-working miners demanded a share of the wealth. Things got especially violent in places like Bisbee, but Globe also had its tense moments.

Rumblings of discontent were heard early in the year and gradually increased as summer neared. By June, the Industrial Workers of the World (IWW), commonly known as the "Wobblies," had infiltrated the work forces of the local mines. The IWW consisted of outside agitators, and they were treated as most unwelcome visitors by mine officials and the local police. Some people considered their activities to be a German conspiracy to undermine the war effort. The discontented miners welcomed them with open arms.

On June 29, representatives of miners' unions met with the managers of the copper companies and presented a list of demands. These were soundly rejected, so a strike was called for at 7 a.m. on July 1, 1917.

At the end of the graveyard shift on the first day of July, about one thousand strikers and sympathizers gathered at the entrance to the Old Dominion property. About sixty men remained at the mine to tend the company ledgers and man the pumps that kept the tunnels dry. Anyone who tried to gain entry to the premises was greeted with rocks, stones and abusive barbs thrown by the angry strikers. A truckload of supplies was turned back at the gate and the incoming evening train was stopped and searched for strike-breakers. The situation was very tense for several days, and the sheriff did his best to deal with it. He deputized and armed every available man, and formed a group called the "Home Guard" to assist him in case of serious trouble.

The people of Globe had made plans for a Fourth of July "celebration to end all celebrations." On the morning of the Fourth, angry and moody strikers,

sympathizers and agitators gathered in groups on Broad Street, intent on spoiling the day's festivities. The untrained but well-armed Home Guard was performing marching drills nearby.

As the parade was ready to begin its march down Broad Street, Mayor G. D. Barclay canceled the day's grand celebration, fearing violence and bloodshed on the streets of Globe.

By this time, provisions for the sixty men on twenty-four hour duty at the Old Dominion had about run out. The mob at the gate had turned back the milk truck, the ice truck, the company doctors and the company executives. Sheriff Armer and a group of fourteen deputies did manage to crash the picket line in a festively-decorated truck borrowed from an entrant in the parade. The officers stood guard at the smelter to protect the property.

In the meantime, Arizona Governor Thomas Campbell had arrived in Globe to do what he could to ease the tension. At the request of the strikers, he personally drove a supply truck onto the Old Dominion and returned with the sheriff and his deputies. Due to the possibility of violence, he felt compelled to call in Federal troops to restore order in Globe. The next day four units of the Seventeenth United States Cavalry, including a machine gun company, traveled from Douglas and set up camp in Globe. One unit pitched its tents on the slag dump below the smelter.<sup>6</sup>

With the troops on hand, the explosive situation was largely defused. Gradually the miners returned to work and production resumed. By early August the Old Dominion was operating on a limited schedule. In October, an uneasy settlement was negotiated, and the mine was soon back to normal production.

## Down and Out

About 1400 men were on the payroll of the Old Dominion Mine in 1919, and its mills and smelter were processing five hundred tons of ore per day. But the mine never returned to its pre-war glory. Neglected repairs, water damage in the shafts and tunnels and decreasing grades of copper in the ore were all factors in the slow but steady downturn of the mine. It was shut down for a year during a recession and re-opened in 1922. Two years later the smelter was permanently closed and the Old Dominion concentrates were sent to Asarco's gigantic International Smelter at Miami.

Flooding of the mine continued to be a problem, and ore grade gradually declined. The ore grade

was rated at 4.16 percent copper in 1929, but by 1930, it had dropped to 2.27 percent. In 1931, unable to satisfy its payments to the Phelps Dodge Company, the Old Dominion Copper Mining and Smelting Company went out of business.

Over the next few years most of the mine buildings were dismantled and used elsewhere, or sold for scrap. The rails and ties of the industrial railroad were pulled and used on other railroad lines. Only concrete foundations, slag and tailings piles, and a shaft with its head-frame and hoist house remained on the once busy property. Old timers said that there was "plenty of good copper down there," and, by modern standards, there was. But, the Old Dominion was never revived as a copper mine.

In 1940, the property was purchased by Miami Copper Company for \$100,000. It wasn't copper that interested the new owners, however, but the mine's old nemesis, water. It was pumped to Miami Copper's operations at Castle Dome, Copper Cities and Miami. For a time, the City of Globe also used water from the mine for its domestic water supply. Today, water from the depths of the Old Dominion Mine is used by the Pinto Valley Division of Magma Copper Company at its operations near Miami.

During its half-century of existence, the Old Dominion Mine produced some 800 million pounds of copper and provided its owners and shareholders with gross returns of over 134 million dollars. It provided a way of life for thousands of miners and craftsmen and their families, and dictated the economy of the City of Globe.

The departure of the Old Dominion Mine did not spell the death knell of mining in the Globe-Miami area. In the early part of the twentieth century, two large copper mines, the Inspiration Consolidated Copper Company and Miami Copper Company, were developed at Miami, and these two mines are in full operation in the 1990's. With new processing techniques, modern equipment, efficient management and sheer determination, copper mining remains an active industry in the Globe-Miami area.<sup>7</sup>

## Notes

1. The Chicago, New York and Keystone claims later were acquired by Inspiration Copper Company and were successfully mined by more efficient methods of processing low-grade ore.
2. John J. Williams was a brother of Benjamin

and Lewis Williams, well-known mine managers and entrepreneurs in Bisbee, Arizona.

3. The Gila Valley, Globe and Northern Railroad was delayed by a long battle for right-of-way across the San Carlos Apache Reservation.

4. To honor and remember the three men who died in the Interloper fire, the management and work force of the Old Dominion Mine donated money for the construction of the Old Dominion Library in north Globe. Ironically, this building was destroyed by fire in 1981.

5. The association's Mine Rescue Station is now home of the Gila County Historical Museum.

6. The Seventeenth Cavalry, which had been on the Mexican border during the Pancho Villa affair, remained in Globe for over a year.

7. The Inspiration Consolidated Copper Company and the Miami Copper Company are now owned and operated by the Cyprus Amax Minerals Company and Magma Copper Company, respectively.

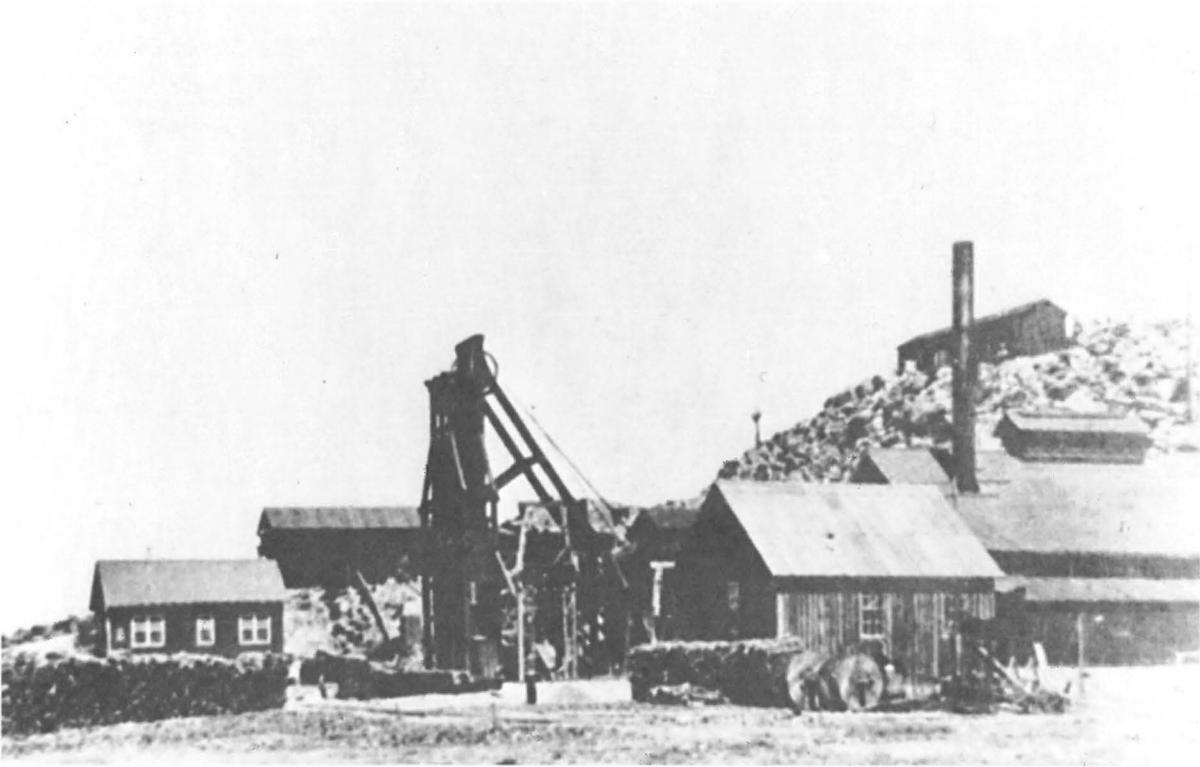
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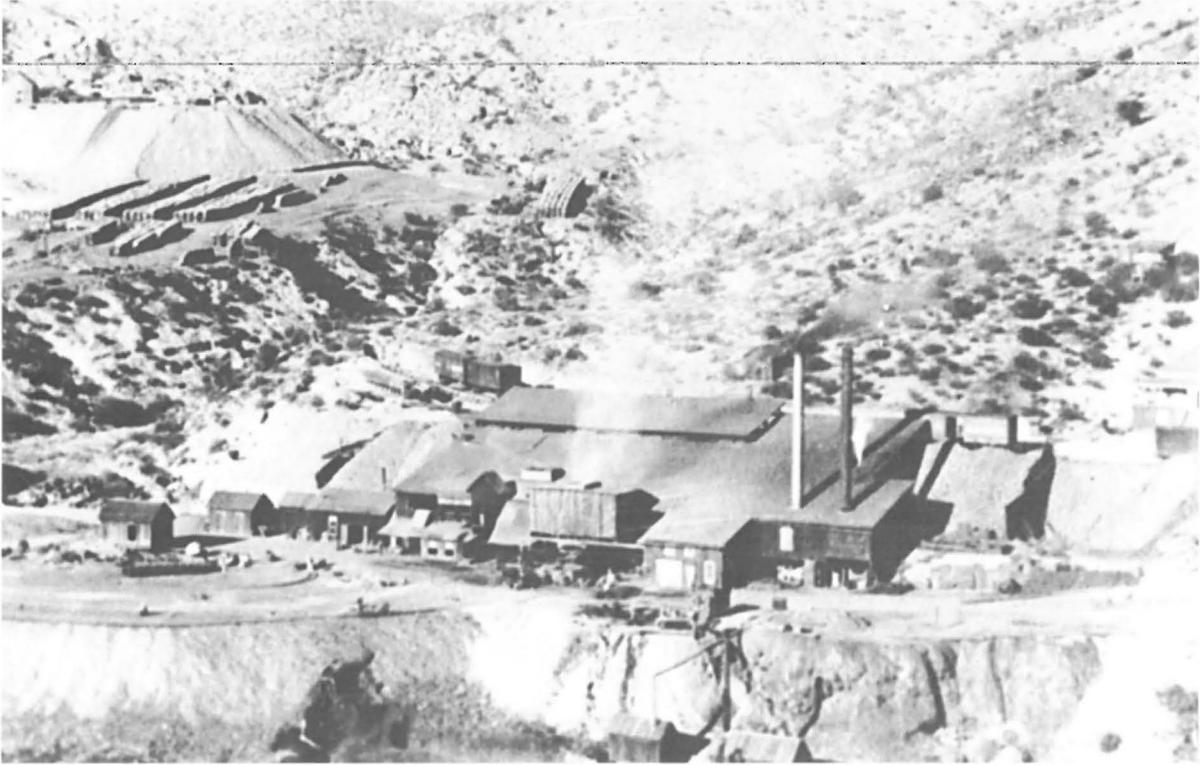
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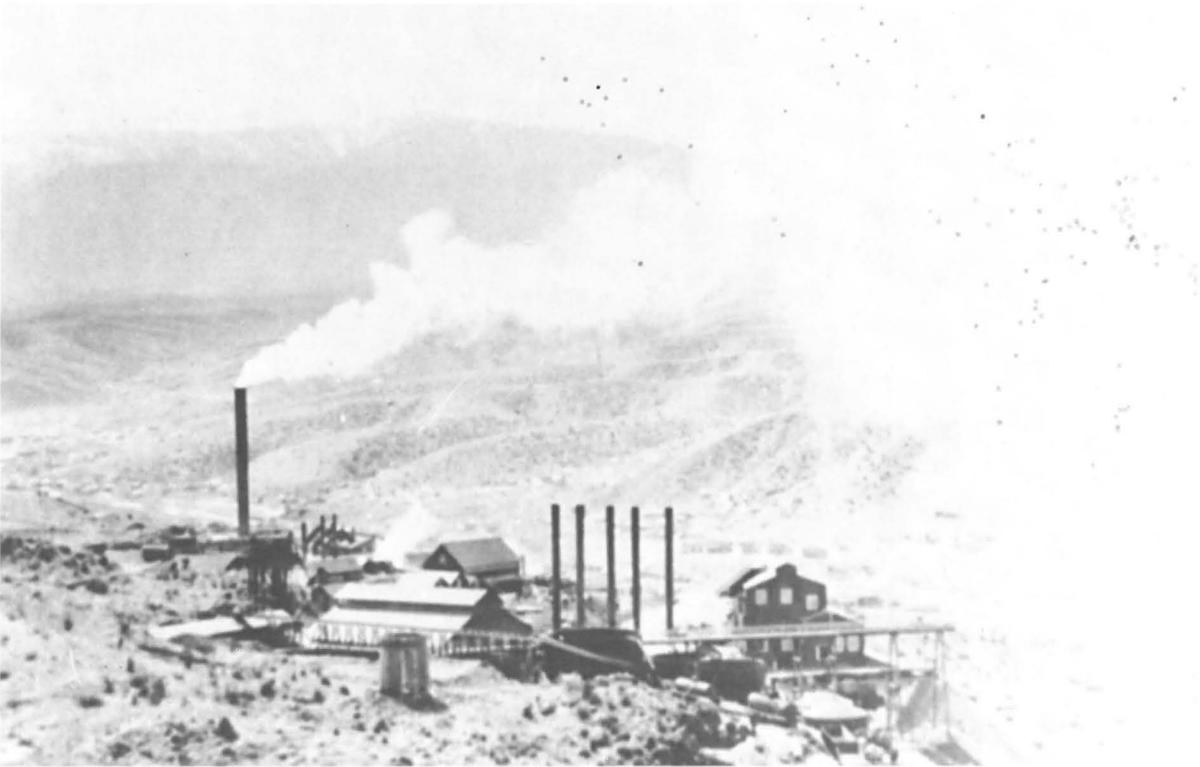
Old Dominion Mine, 1800s. Courtesy of Gila County Historical Society.



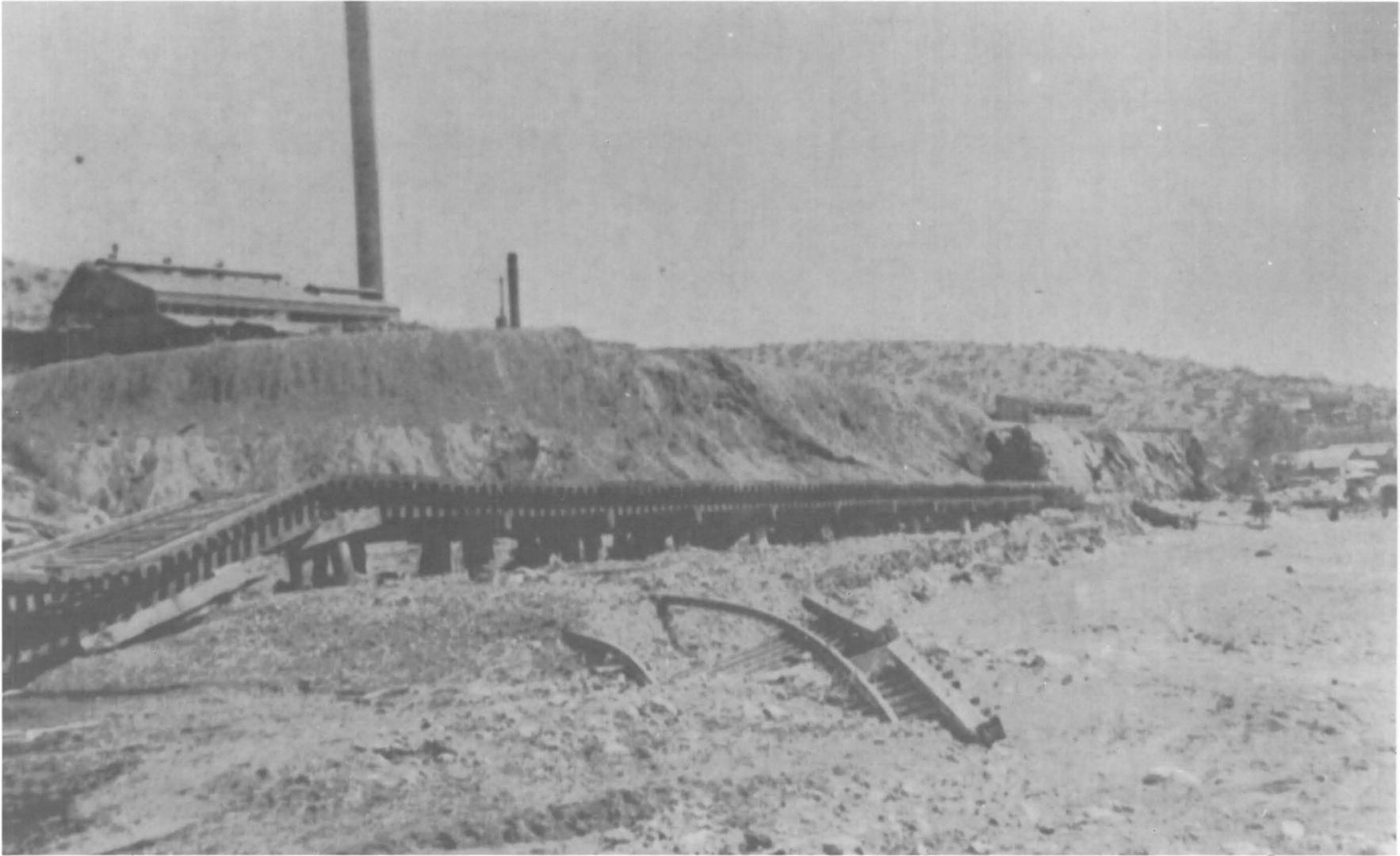
The 1891 smelter. Courtesy of Gila County Historical Society.



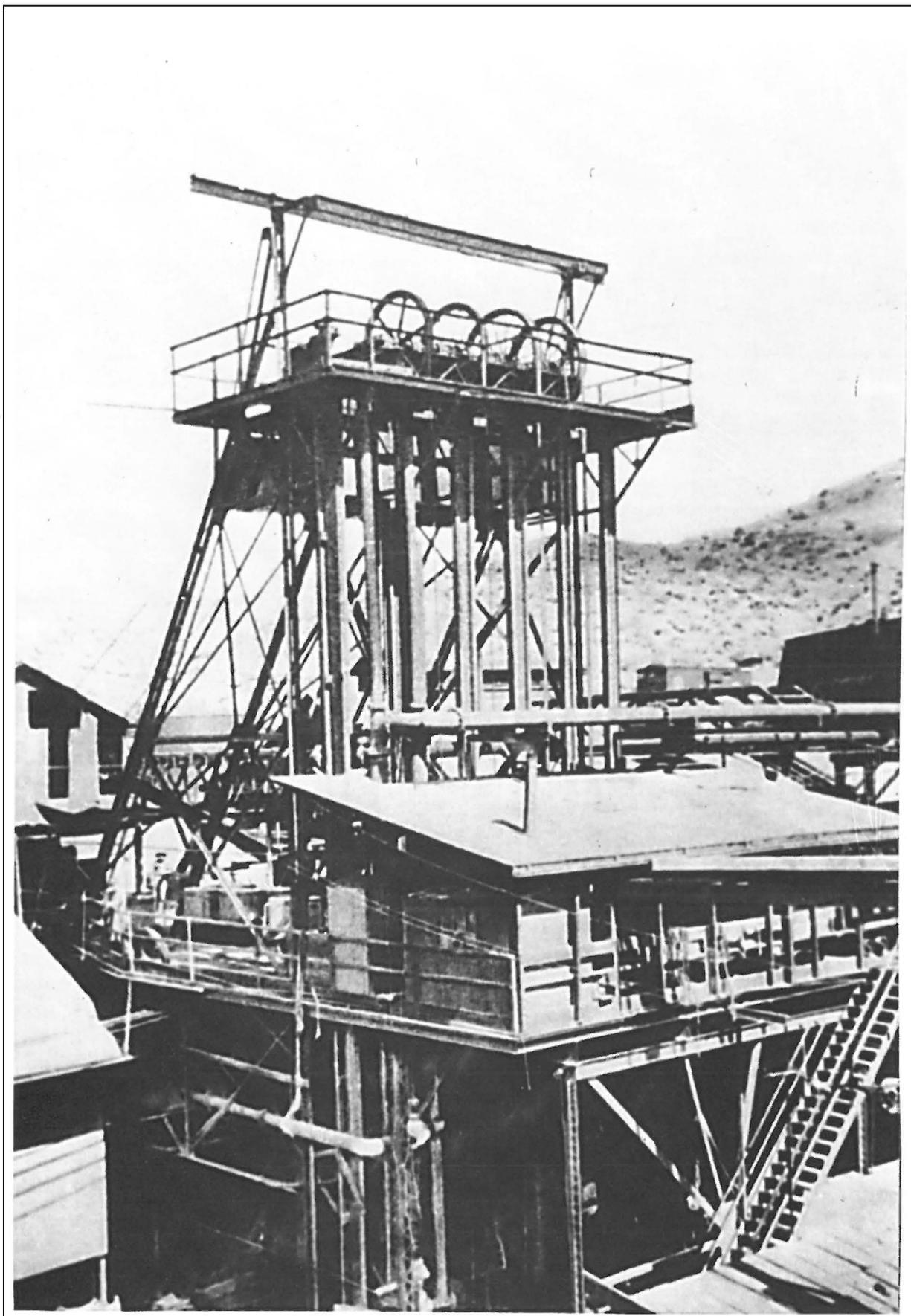
Old Dominion Smelter, circa 1900. Courtesy of Gila County Historical Society.



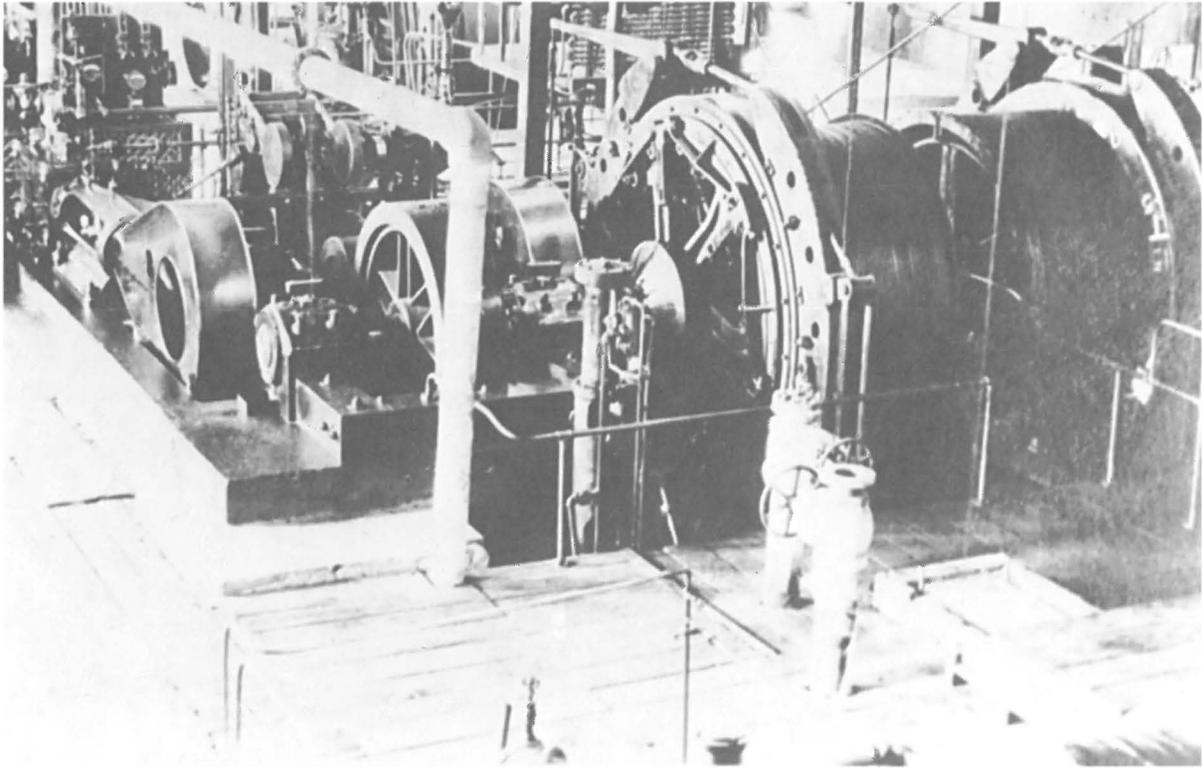
Bird's-eye view of the Old Dominion Plant. Courtesy of Gila County Historical Society.



Washout of Pinal Creek below the mine, 1904. Courtesy of Gila County Historical Society.



"A" Shaft head frame. Courtesy of Gila County Historical Society.



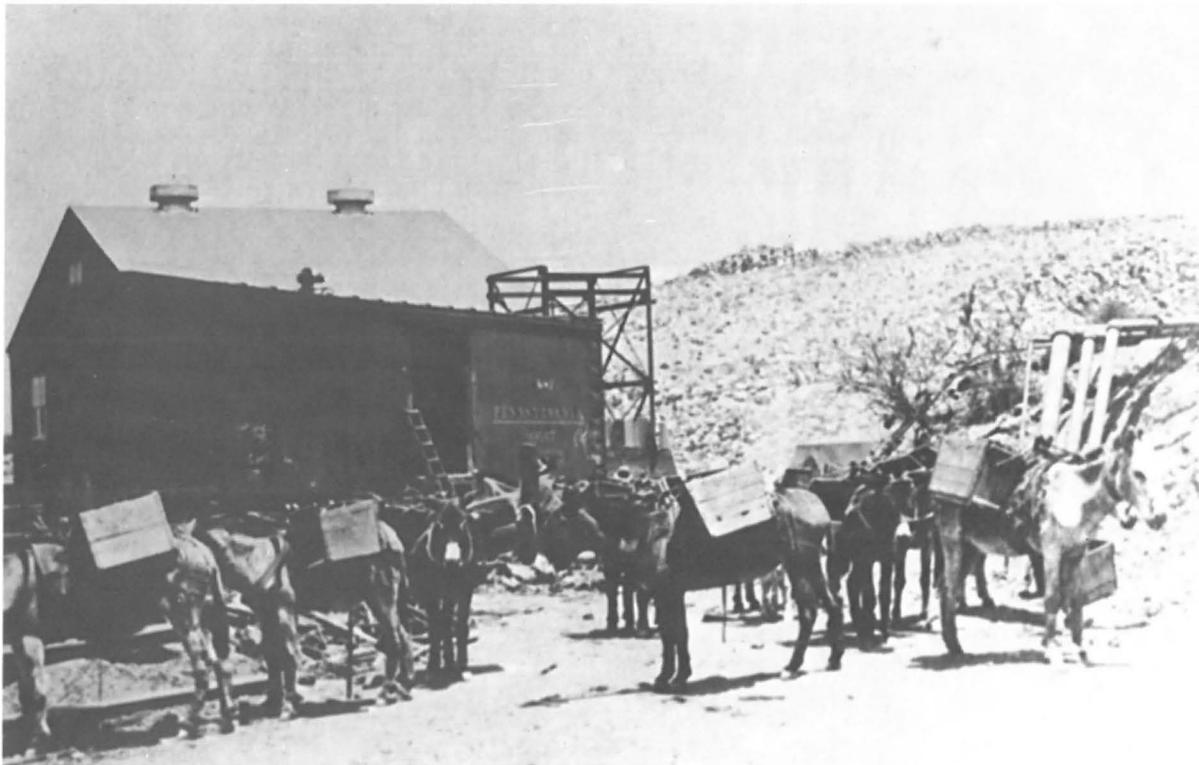
"A" Shaft hoist house. Courtesy of Gila County Historical Society.



Concentrator building, 1913. Courtesy of Gila County Historical Society.



Mine foreman, 1913. Courtesy of Gila County Historical Society.



Ore being delivered to the Old Dominion from outlying mines. Courtesy of Gila County Historical Society.



Water in "A" Shaft, 18th level, 1917. Courtesy of Gila County Historical Society.



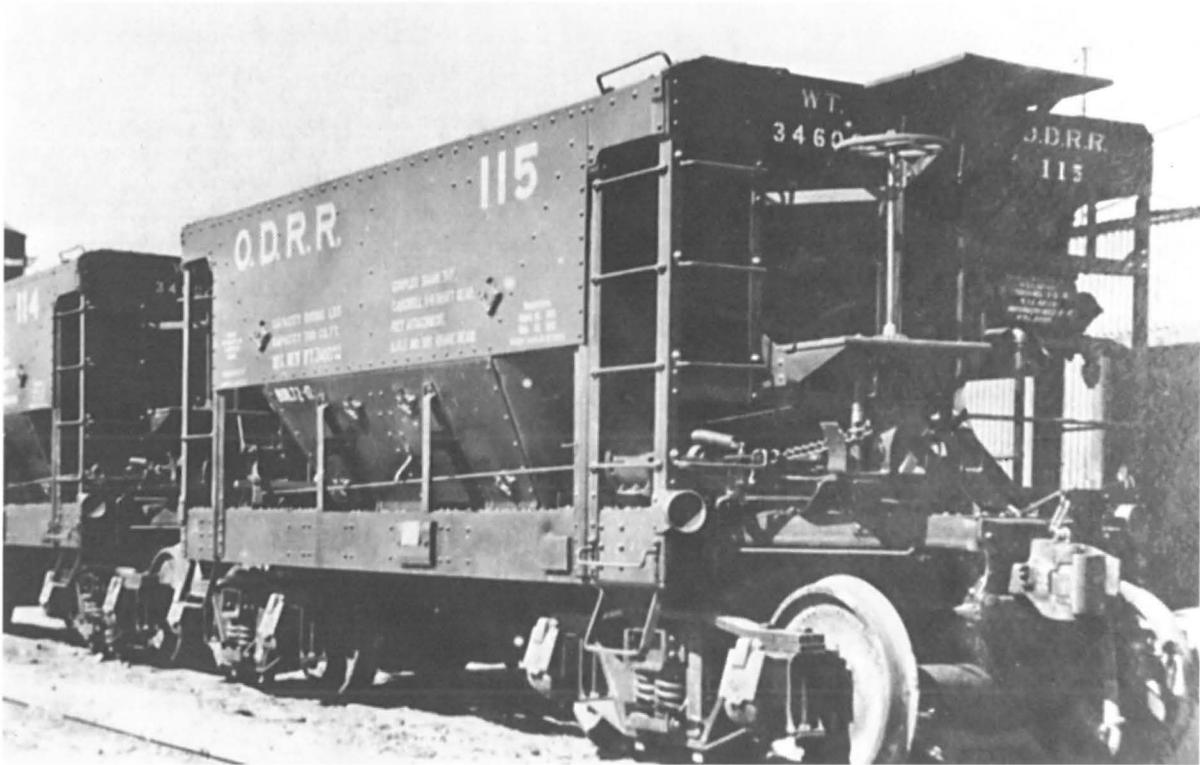
Number 1807 Drift, 1917. Courtesy of Gila County Historical Society.



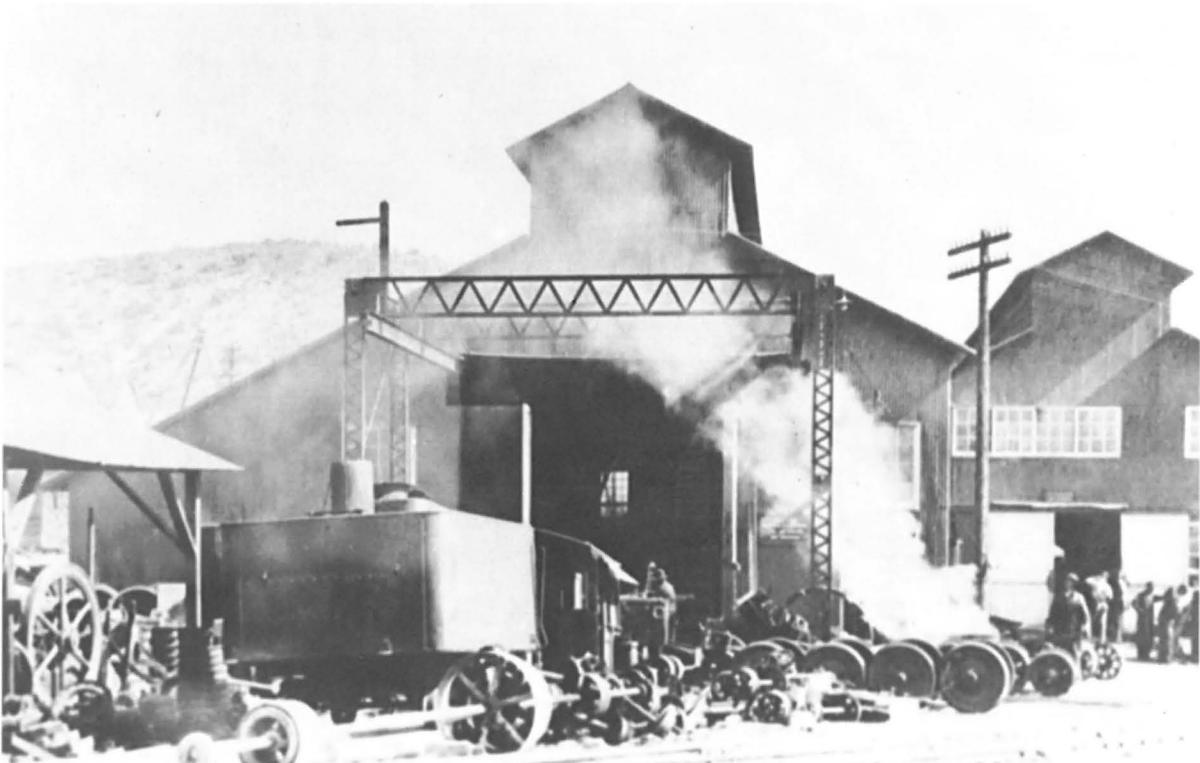
Waugh drilling apparatus, 1917. Courtesy of Gila County Historical Society.



Old Dominion Railroad locomotives and crews. Courtesy of Gila County Historical Society.



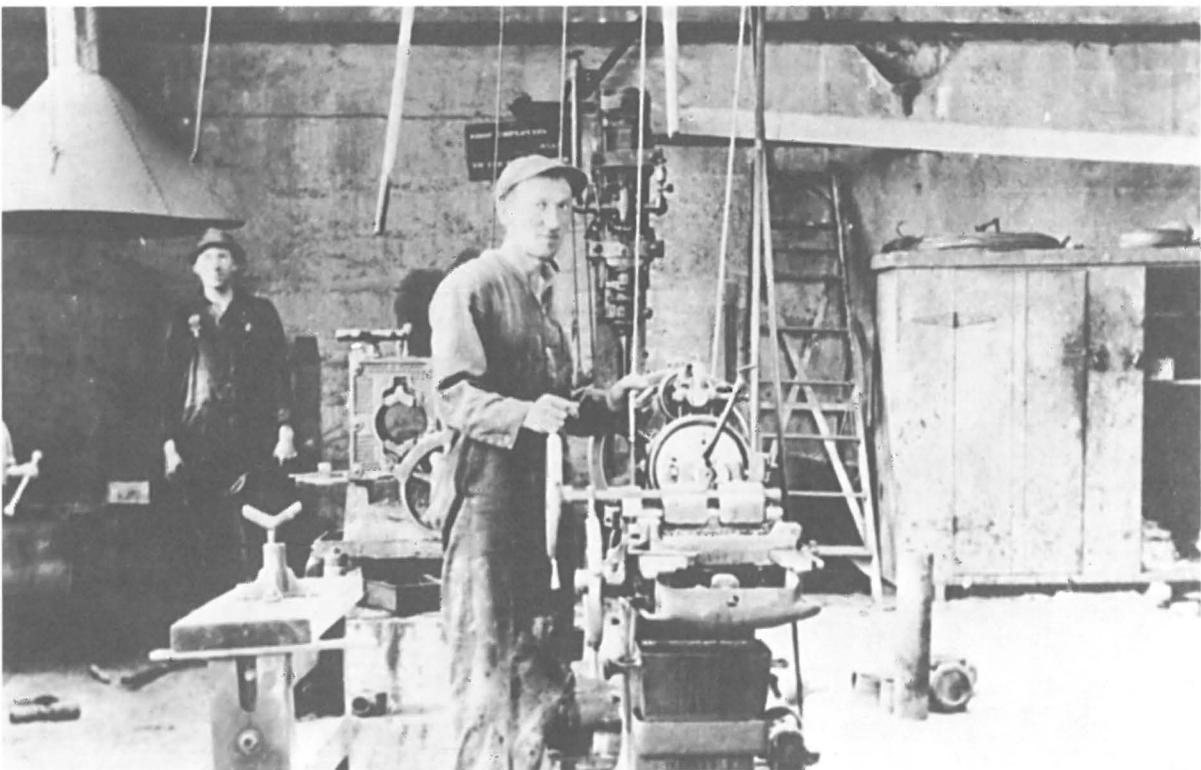
Old Dominion Railroad ore cars. Courtesy of Gila County Historical Society.



Machine shop, 1917. Courtesy of Gila County Historical Society.



Blacksmith shop crew. Courtesy of Gila County Historical Society.



Interior of blacksmith shop. Courtesy of Gila County Historical Society.



Interior of the Old Dominion Smelter. Courtesy of Gila County Historical Society.



Smelter crew. Courtesy of Gila County Historical Society.



Sheriff and deputies guarding, 1917. Courtesy of Gila County Historical Society.



U.S. Army camp on slag dump. Courtesy of Gila County Historical Society.



Loading provisions for men working during the 1917 strike. Courtesy of Gila County Historical Society.



Ore bins, foundations and a working shaft are about all that remains in 1995. Courtesy of Gila County Historical Society.

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