

CHAPTER 1



Laboring in the Boss's Shadow

MINING IN twentieth-century Bolivia produced no greater magnate than Simón I. Patiño. From modest provincial beginnings Patiño became the country's richest man and one of the wealthiest individuals in the world. His initial success depended on the willingness of his earliest workers to fight and perhaps die to defend his property. In 1895, while working as a clerk for the small Germán Fricke mining company in the city of Oruro, the future impresario purchased a partial stake in "La Salvadora," a claim located in the northern reaches of the neighboring department of Potosí. He bought out his partner in 1897, yet legal disputes hampered the mine's development. Pedro Armando Artigue, a Frenchman, insisted that his own claim overlapped Patiño's. Artigue had never occupied his claim but nevertheless pursued a lawsuit. In 1901 Patiño's workers discovered a rich seam of tin in La Salvadora's main mineshaft. Artigue intensified his attempts to dispossess Patiño, setting about to seize the claim by force. The Frenchman recruited a band of around seventy men for the assault. Patiño turned to his own outnumbered workers, who scraped together an irregular assortment of firearms and prepared to defend La Salvadora. Patiño's men

used the mountainous terrain against the attackers, rolling boulders down the hill as Artigue's men sought to make their ascent. Patiño's workers held their position through a whole day. The future "tin king" received a minor bullet wound, yet surprisingly only one person was killed in the fight. As night fell, Artigue's followers abandoned the struggle, convinced that Patiño's men planned to counterattack the following day. While wrangling in the courts continued to occupy Patiño and his lawyers for years, his workers' tenacious defense of his claim guaranteed the man from Cochabamba the foundation of his empire.¹

Personal bonds formed in an isolated mining camp allowed Simón I. Patiño to mobilize his workers in defense of his claim. Such situations were typical, for mine owners sought to foment the dependence of their workers and develop an accompanying sense of benevolent paternalism. These practices and antiquated workplace arrangements inherited from the colonial period retarded the development of a union movement in Oruro and northern Potosí during the early years of the twentieth century. Nonetheless, hostilities existed, and incipient industrialization sparked by silver mining in the nineteenth century exacerbated the tensions and resentments. The transition to tin mining at the dawn of the twentieth century accelerated the flow of ore through the region's mills and led to the adoption of more expensive machinery. Labor arrangements inherited from earlier periods gave way to modern wage labor. Workers felt a growing economic chasm developing between themselves and the bosses, yet alienation advanced only slowly. Dependence proved a durable phenomenon. A politically powerful sense of class did not immediately emerge, but the momentum of Bolivia's industrial and political development continued to propel history in that direction.

THE LEGACY OF SILVER

An Indian named Diego Huallpa discovered Potosí's silver in 1543. Chroniclers disagree as to the details of his story; two slightly different versions exist. In both, nightfall caught Diego Huallpa and a herd of livestock on

the slopes of Potosí's Cerro Rico, or Rich Mountain, so he made camp there. Some chroniclers relate that he stumbled on a rich vein of silver the following day. A misstep caused him to lose his footing while chasing a deer, and to save himself from tumbling down the mountain, he grabbed a bush, which tore out by the roots. As he lay supine on the hillside, he noticed a rich coat of silver on the clump of earth in his hand. The second version records that the night Diego Huallpa spent on the mountain was exceptionally cold; to warm himself he built a fire of grass and twigs. The next morning he found rivulets of molten silver had poured from the fire during the night. No matter how he made the discovery, Diego Huallpa sought to conceal the news from the Spaniards, for he hoped to grow wealthy working the silver in secret. One of his companions eventually revealed the strike after a fight over the division of profits. In 1545 the rush to Cerro Rico began; Potosí soon became the largest city in the Americas.²

Diego Huallpa's secret exploitation of Cerro Rico's silver highlights the emergence of a segment of Andean society that gravitated toward mining and away from the agricultural vocations of the countryside. Here was the sixteenth-century appearance of what would become the twentieth-century working class of the mines. Right after the Spanish Conquest, an important nucleus of Indian miners quickly developed. As the colonial period advanced, a special stratum of the popular classes devoted to mining consolidated itself even further. Significant numbers of unskilled rural migrants, both voluntary and involuntary, came to populate the silver mines of colonial Potosí and Oruro, but professional miners formed the core of the colonial labor force. Many of these miners identified themselves as Indians, but they were not Indians of the same type as those devoted to agricultural occupations in the countryside. Over time, members of this mining stratum moved in the direction of a mestizo identity—a mixture of European and Andean culture.

While the infamous involuntary labor draft known as the *mita* dominates popular thinking about silver mining in the colonial period, the industry employed significant numbers of free laborers. During the initial rush to Potosí in the mid-sixteenth century, Andean people enjoyed surprising autonomy in their exploitation of Cerro Rico's more accessible

silver deposits—although declining ore quality in the 1570s and the introduction of new technology such as mercury amalgamation milling led the Spaniards to assert greater control in the workplace. Even then, however, while the *mita* forced Spain's rural, Andean subjects to labor in Potosí and other mining camps, not all cities enjoyed the same level of royal patronage. In particular, the city of Oruro, founded in 1606, had to function with an assortment of free labor arrangements. Potosí itself attracted numerous voluntary laborers despite the influx of draft workers. These willing mine workers built a flourishing urban culture uniquely Andean and uniquely colonial with its own, often illicit, economic underpinnings.

During Potosí's early decades, Andeans dominated silver production employing their own pre-Columbian methods.³ Diego Huallpa had ties to the nearby Inca mining settlement of Porco, which provided Potosí with its first settlers and laborers. Andean prospectors preferred high-grade surface deposits and developed techniques to exploit them efficiently. The most striking invention of this type was a wind-powered furnace called a *wayra*.⁴ Pedro de Cieza de León, a Spanish chronicler, described it thus: "To extract the metal they make pottery forms in the size and manner of earthen pots in Spain; they have in a number of places holes or ventilation. In these contraptions they place charcoal with the metal on top. Sited on hills and heights where the wind blows with more force, they extract the silver, which is then purified and refined with small bellows or cane tubes through which they blow."⁵ Another chronicler, Luis Capoche, counted 6,497 *wayras* in Potosí in the late sixteenth century.⁶ De Cieza de León said of the thousands of small furnaces, "At night there are so many of them on all of the hills and heights that they resemble decorative lights."⁷

Using the *wayra* and other inventions, Andean people extracted and refined much of the mountain's silver with little Spanish supervision. The first Indian laborers produced two marks of silver (or a bit over sixteen ounces) per week for their European masters; anything beyond that they kept.⁸ Noting workers' independence during this period, Pedro de Cieza de León wrote, "As the Indians have not had supervisors, and nor is it possible to control their extraction of silver, as they go and take it from the hills, it is believed that many of them have grown rich and carried off to

their lands a great quantity of this silver.”⁹ In fact, during the 1550s and 1560s a class of Indian contractors emerged to organize mining operations. European owners held the claims, but they leased those claims to Andean bosses who employed other Indians as laborers. The contractors shared a portion of the ore with Spanish owners.¹⁰ Luis Capoche, a mine owner himself, described these arrangements: “Many entrepreneurial Indians have of their own volition entered into agreement with the mine owners so that they might work a few meters of the mine. And the mine owner gives them metal bars, which they then set and sharpen at their own cost—they [the Indians] also supply the candles. And the recompense and interest that they receive is that the mine owner sells them the rich ore that they have extracted.” Capoche summed up the arrangement by declaring, “The Indians possess all the riches of the kingdom.”¹¹

Declining ore quality and the introduction of mercury amalgamation milling changed the balance of power between the Andean population and Spanish mine owners. The amalgamation technique first appeared in the Americas in Mexico in the 1550s, but Potosí’s mine owners did not start employing the new technology until the 1570s. Amalgamation allowed for the extraction of silver from low-grade ore resistant to traditional Andean methods.¹² During the years of *wayra* milling workers discarded mounds of rock judged to be worthless, and these accessible piles of waste became the initial source of ore for the new amalgamation mills.¹³ Viceroy Francisco de Toledo, the great organizer of sixteenth-century Perú, firmly believed in the technology’s promise. “The new process of amalgamation is what shall determine the restoration of this kingdom,” he wrote in 1574.¹⁴ The infrastructure to support amalgamation required an enormous investment of capital and labor, so the viceroy hoped to promote the continued growth of mining by having government play an active role in marshaling the necessary labor. The colonial administration ultimately threw its bureaucratic weight behind reforms promoting the profitability of amalgamation. This is when the infamous labor draft known as the *mita* emerged as a central element of colonial rule in the Andes. Precursors to the *mita* existed in Potosí prior to Francisco de Toledo’s arrival, but the new viceroy gave the system royal sanction and placed the authority of the colo-

nial government behind its administration. In its ideal form, the *mita* would marshal one-seventh of the adult male population of fifteen provinces in Perú and Alto Perú each year for labor in Potosí or other nearby mines. *Mitayos* (as the draft laborers were known) had to work for one year before returning to their rural homes. Spanish law established the wage, hours, and conditions of labor. Viceroy Toledo organized his first *mita* for Potosí in 1572; by the end of the year some 9,500 Indian men found themselves ordered to the mines.¹⁵

Potosí's silver production peaked in 1592; Cerro Rico would never again yield that much silver. The boom did not immediately end, but production began a long, slow decline over the course of the seventeenth century. By the early eighteenth century production had fallen back to the level of the 1570s.¹⁶ But Potosí's is not the only story of silver mining in Alto Perú. Over the course of the seventeenth century other districts sought to challenge the Imperial City's dominant position.

The city of Oruro, with its own rich hills, stands out as an important rival. The Spanish founded Oruro on November 1, 1606.¹⁷ Some hoped to develop the city's mines along the same lines as Potosí's—with coercive *mita* labor. Despite petitions from Oruro's mine owners, however, the region never received the royal patronage of a *mita*, for Potosí's mining lobby consistently swayed royal officials against the idea. Throughout the colonial period Oruro relied on wage labor and its colonial variants. Spaniards sometimes transferred *mita* Indians to Oruro (often illegally), but compulsory labor never became the norm.¹⁸ Mine workers in Oruro enjoyed relatively high wages, opportunities for illicit enrichment, and a strong bargaining position vis-à-vis their employers. Over the course of the colonial period, the city's labor force developed a strong, acculturated, urban nucleus—a trend that eventually marked mining settlements throughout Alto Perú.¹⁹

Potosí's labor force developed in a similar manner despite the presence of thousands of *mita* Indians. By 1600 more than half the workers employed in the region's mines and mills had no connection to the *mita*. During the seventeenth and eighteenth centuries a growing number of laborers came to depend on wages and related income to support their

families. The skilled workers who drove the advance of the shafts, men known as *barreteros*, provide an example of Potosí's wage labor arrangements. Using metal rods and heavy hammers, the *barreteros* followed the mountain's hidden veins of ore. Because of their importance, these laborers could demand cash advances on their wages even though employers complained of the fraud that plagued the system, for workers sometimes sought money from several mine owners but then labored for only one or none. Skilled workers also demanded a cut of the ore as a supplement to their regular wages.²⁰

The practice of *kajcheo* (illicit mining carried out at night or on holidays) also strengthened the position of the urban popular classes in mining zones. Potosí's silver attracted determined and creative plebeians seeking to cheat the powerful of their riches. Royal officials and mine owners deplored these men, the *kajchas*. Such bandit miners sometimes occupied abandoned shafts, but they also raided active mines, bribing or overpowering any guards. Some *kajchas* lived exclusively from their illegal activities; others engaged in occasional raids to supplement their wages. Small, quasi-legal mills powered by human labor alone complemented clandestine mining. These mills processed silver provided by *kajchas* or by workers seeking to dispose of ore pilfered from the workplace.

Wage laborers and the socially related *kajchas* formed an important stratum of colonial urban society. One of Potosí's more flamboyant *kajchas*, Agustín Quespi, appeared in the work of Bartolomé Arzáns de Orsúa y Vela, an eighteenth-century chronicler. The chronicler identified the indomitable Quespi as an Indian but used the term as a racial marker and not a cultural indicator. The bandit miner was a native of Potosí—"his home was this city"—raised in the household of an influential Basque colonist. Quespi understood perfectly the society, culture, and economy of the colonial urban environment. Potosí's mine owners despised and feared this *kajcha*. "He became so feared on the Hill that the bravest Spaniards fled from his presence," wrote Arzáns de Orsúa y Vela. Despite Quespi's ferocious reputation, the chronicler found much to admire in his character and noted that the working class of Cerro Rico respected the *kajcha* as a popular leader: "Many *kajchas* (those who violently go in search of metal

during holidays with the strength of their arms and danger to their lives) called him their captain.” Yet the mine owners wanted to destroy Quespi. “So great was his fame, that the owners wanted to drink his blood,” Arzáns de Orsúa y Vela recorded; “they planned ambushes, surrounding him with thirty or fifty men, and he, sometimes alone and sometimes with his companions, attacked and beat them with sheathed blades, sabers, clubs, slings, and stones. Because of his valor and strength, all fell before him.” The chronicler mentioned that all this created the dark suspicion that Quespi “had a pact with the devil”: “‘Certainly,’ they said, ‘a small Indian of such ruinous appearance could not naturally raise such resistance.’” But Arzáns de Orsúa y Vela noted that the *kajcha* leader executed his raids with a certain care and consideration. “This Indian Agustín did no damage in active mines,” the chronicler wrote; “true, he went to work with a pair of pistols, because he did not own his own mine and entered abandoned ones or, through passages and tunnels, those owned by others, but he took metal without knocking down supports or causing considerable damage.”²¹

Arzáns de Orsúa y Vela, a Creole, enjoyed a cordial acquaintance with Agustín Quespi. He recorded that one September day—a day of religious celebration—he visited a chapel popular with the *kajchas*. There he encountered Quespi, who greeted him with “much courtesy.” Acting as host of the celebration, the bandit miner invited the chronicler to a drink: “Agustín with his natural courtesy placed in my hands a large glass of that alcoholic beverage which is called *chicha* [a fermented beverage made from corn] and asked me with sweet words to drink, for surely the sun was fatiguing me.” Yet even in this moment of friendly celebration, the *kajcha* was not a man to provoke. While the chronicler drank, a group of four Frenchmen stopped to converse, “having come to see the Indian celebration.” Quespi invited the four to a drink as well, offering them, in addition to *chicha*, “rich wine and *aguardiente*.” The four lacked Arzáns de Orsúa y Vela’s tact. “The Frenchmen spurned the invitation, and Agustín, seeing their condescension, hurled at them a couple of insults.” The foreign visitors responded with declarations of bravado, at which point Quespi “grabbed the staff of a banner that was there as a decoration and threw himself at the foreigners, breaking the head of one and administering such

blows to the other three, who came at him with swords, that they and their mules were forced to flee.” After this incident, Arzáns de Orsúa y Vela enjoyed the hospitality of the celebration a bit longer but acknowledged a sense of relief at departing: “I found myself quite happy in getting far from those Indians.”²²

Despite the occasional outburst, Agustín Quespi possessed a keen political instinct. He assiduously cultivated the patronage of influential Creoles and Spaniards in the Imperial City. Arzáns de Orsúa y Vela wrote that the bandit miner was “magnanimous and liberal” and that whoever came to him “presenting their needs, he would succor them generously.” Quespi especially courted the priesthood, providing “the priests with parties and the divine cult with donations.” When royal officials succeeded in capturing and incarcerating Quespi sometime around 1725, José Callejas Flores, who was a priest at the San Pablo church and a member of the Holy Office of the Inquisition, mobilized a campaign to liberate him. After appeals and wrangling involving the archbishop of Chuquisaca, officials in Potosí released the bandit miner.²³ *Kajchas* such as Agustín Quespi played an important role in the mining economy of the late colonial period—an economy struggling to recapture the dynamism of earlier centuries.

In the eighteenth century the new Bourbon monarchs of Spain sought to shake Andean mining from its seventeenth-century lethargy. Administrative reforms and other factors succeeded in stimulating silver production. Between 1730 and 1790 silver exports rose continuously, but Alto Perú’s recovery faltered in the 1780s with the Tupak Amaru and Tupak Katari rebellions, the largest Indian revolts of the colonial period.²⁴ The nineteenth century’s wars of independence further debilitated the silver economy. Chronic European warfare interrupted the shipment of Spanish mercury to the American colonies. Fighting throughout South America shrank commerce across the continent. Civil war and invasion took a heavy toll on the economic order of Alto Perú. The *mita* broke down completely; mines flooded or collapsed; and on three occasions—1811, 1813, and 1815—the patriot army of Argentina invaded and occupied the city of Potosí only to be evicted by royalists each time.²⁵ Despite the disorder, neither mining nor its accompanying plebian culture ever completely disappeared. In the

nineteenth century republican Bolivia eventually succeeded in restoring the country's silver mines to vibrancy.

After the establishment of an independent republic in 1825, Bolivia's leaders sought to revitalize the mining economy, with uneven results. Simón Bolívar and Antonio José de Sucre both promulgated laws seeking to spark investment in mining and agriculture, but to little effect.²⁶ The country struggled to attract foreign capital, and mine owners complained of a dearth of laborers. Despite these difficulties, however, Bolivia experienced a miniboom in silver production during the 1830s and 1840s. This early blossoming presaged the more prolonged expansion of the late nineteenth century, an upswing driven by foreign investment and liberal economic policies. The miniboom introduced a number of innovations. To enhance their operations' profitability, several entrepreneurs began to experiment with technological improvements. Potosí's mine owners also had to abandon the *mita* as a dependable source of cheap labor; government officials judged the system anathema to their modern, liberal goals.²⁷

Despite the modernizing changes, some colonial currents flowed into the nineteenth century. A plebian mining culture continued to flourish in the shadow of better-funded entrepreneurs. Small mills and the ram-bunctious *kajchas* played a critical role in Potosí's economy in the 1830s and 1840s. During the early republican period illicit mining provided an important safety net for national silver production. The labor force of the early nineteenth century also maintained a strong bargaining position with employers. Mine owners still viewed workers as undisciplined and undependable. Some laborers continued to scam potential employers out of cash advances, while others continually smuggled the richest rock from the mines.²⁸ *Kajchas* even sought to expand their access to ore and official sanction for their endeavors. The government and mine owners resisted their pretensions.

In 1837 Potosí's *kajchas* penned a letter to government officials outlining a proposed modification of property rights in the mining industry. The *kajchas* began by acknowledging that both government officials and mine owners viewed their vocation with "aversion and repugnance." They admitted past transgressions. "Certainly the men dedicated to this vocation

have only sought to enrich themselves, extracting the best ore with little planning and without considering the accompanying damages to the owner,” they wrote. But, they argued, much of the damage resulted from the illicit nature of their entry into the mines, and they concluded that “ending the cause” would “end the effect.” The bandit miners proposed a “regulated *kajcheo*”—that is, an understanding with the mine owners including specific provisions:

That they permit us to enter their works from Saturday until Monday night—that the respective watchmen turn the shafts over to us with a precise examination of their condition—we will then bear the responsibility of guaranteeing to them, in whatever manner they wish, that we will return the shafts to the same watchmen without risk and with no damage done. In this period, with all of the formality of the Regulations, we will exploit the metal with our tools and whatever else may be necessary. The extracted metal will then be divided between the individual mine owner and ourselves; he may even buy our part at a just price established by a third party, as long as we agree.

The *kajchas* claimed their proposal would benefit the mine owners, who would “not have to make up-front payments” and would “be spared the cost of tools.” In fact, they argued, this would leave the owners in a better position than that of the *kajchas*, who labored with no certainty of recompense. Finally, the *kajchas* claimed a service to the republic in cushioning the blow of a mining slowdown: “There is the need that exploitation continue in order to conserve the working class and amass metal.”²⁹

All Potosí’s major mine owners rejected the proposal, complaining, “Experience has proven how prejudicial the *Kajchas* are.” Nonetheless, mine owners sometimes employed *kajchas* as contract workers, but on their own terms. They concluded, “Voluntary arrangements are not prohibited by the Law; in this way the petitioning workers might enter into agreement with those mine owners who wish to employ them in their works.”³⁰ The bosses sought to keep government out of the contracting process. The *kajchas* sought to obtain a greater range of legal options and to force open mines previously closed to them. The government declined

to act on the *kajchas*' petition. As the nineteenth century advanced and modernization continued, the mine owners never succeeded in completely disciplining strong-willed laborers.

In the 1850s and 1860s new Chilean, North American, and European investors began to express interest in Bolivia's mining industry, and a handful of the nation's businessmen emerged as the representatives and managers of this investment. The historian Antonio Mitre has termed these privileged individuals the "silver patriarchs," and they all came from prestigious, land-owning clans: the Aramayos, the Pachecos, and the Arces. To make Bolivia productive in the late nineteenth century, mine owners contracted European engineers and industrialized with steam-powered machinery. Doing this required a greater capital investment than even the wealthiest Bolivian families might afford alone.³¹ Foreign capital became a necessity.

Mine owners wedded to foreign backers required new laws congenial to their liberal, free-trade ideology. Vocal elements among the popular classes, however, resisted the loss of protective regulations developed during the colonial period. The government eventually sided with the silver patriarchs. The mining oligarchy achieved its greatest legal triumph on October 8, 1872, when the government legalized the export of silver bullion. The new law reversed the colonial practice of exporting only silver coin and paved the way for an even greater influx of foreign capital and the progressive consolidation of mining in the hands of a few powerful companies.³²

Support for colonial protectionism did not immediately disappear; elements among the popular classes fought the ascendancy of the silver patriarchs. In 1876 Sucre's artisans directed a protest to President Hilarión Daza (1876–1879) calling for the suspension of the new silver export law. The artisans complained that liberal economic policy damaged the public good: "The free export of bullion . . . has done nothing more than move the monopoly of purchase, once exercised by the State for the public good, into the hands of bankers, mine owners, and merchants for their own particular benefit." The artisans insisted on the principle, established during the colonial period, that mineral deposits belonged to the state

and not individual mine owners. The state conferred only a “usufruct contract” to mineral deposits, and the mine owners had to accept this “with the implicit condition to sell the bullion at a fair market price” to the government. Sucre’s artisans argued that the principles of liberal “economic science” did not apply to mining and that the “industrial liberty” of the mine owners needed limits. “Liberty, this precious gift that God has given to man, has as its soul justice and is guided by reason: lacking these conditions it is nothing more than an antisocial element,” they contended. Finally, the artisans ridiculed the oligarchic assembly of 1872 that first approved the law, calling its members “men of much knowledge, who so often lose themselves in the realms of their vast illusions.”³³ The government sided with the influential men of “vast illusions” and upheld the laissez-faire export law of 1872. The legal enthronement of economic liberalism helped open a new era in Bolivian mining in the 1870s.

Bolivia’s silver production rose throughout the final decades of the nineteenth century, and foreign capital flooded in despite a steady decline in silver’s international value during the same period. In the 1860s the country exported an average of 344,000 marks of silver annually; by the 1890s Bolivia was exporting an average of 1.6 million marks annually. Between 1875 and 1890 Bolivia stood as the world’s third-largest silver exporter, contributing around 10 percent of global production. Production peaked in 1895, when the country’s mines produced around 2.6 million marks.³⁴

The silver boom and the mining oligarchs’ accompanying political dominance had important repercussions for Bolivia’s popular classes. In the countryside the government imposed laws to privatize land belonging to Quechua and Aymara communities, though the plan sometimes met effective resistance.³⁵ In addition, the working class resisted the discipline that the oligarchs sought to bring to the mines. The bosses employed every legal device available, including fines, criminal charges leveled against “ore thieves,” and educational programs. In 1852 José Avelino Aramayo published a series of internal regulations for his firm, the Anacona Society, the first such guide published by a Bolivian mining company. Internal regulations of this type made an uneven advance in many mines during the final

decades of the nineteenth century. Mining companies also began to encourage the creation of municipal mining police or their own private security squads. These forces sought to eliminate absenteeism and limit the consumption of alcohol. The mine owners further set them to guard against the theft of ore and to suffocate sedition among the workers. Mine owners also launched a sustained campaign against religious celebrations that might keep workers away from the mines.³⁶ At best, however, the campaign for greater discipline achieved only moderate success.

The mine workers, who numbered a little more than 6,500 in the mid-nineteenth century, sometimes fought the impositions openly but principally employed more subtle tactics of everyday resistance.³⁷ Workers had their own ideas about proper treatment and reacted vigorously to perceived infringements. When the Colquechaca-Aullagas Company fell behind on its payroll in the early 1890s, for example, threatening flyers began to appear around the northern Potosí mining town. The postings depicted a bundle of dynamite about to be lit and bore a caption reading “The dynamite asks the administrator to pay the working people who are poor and frustrated.”³⁸ Laborers bristled at greater regulation and supervision, especially when mine owners failed to reciprocate with prompt and adequate compensation.

The mining labor force of the nineteenth century was a mix of skilled urban workers and seasonal rural migrants, but industrialization magnified the importance of experienced laborers settled permanently in the mining camps. Steam power and the slow but steady mechanization of mining eliminated many job categories previously filled by temporary rural laborers; the labor-intensive work of mercury amalgamation and the manual transport of ore grew rare in better-financed mines. Mechanization required new technical skills—the introduction of more machinery led to specialized positions such as engine operator—and the mechanics’ workshop became an essential division of any large operation. At the same time, to meet the shrinking but still unavoidable demand for unskilled labor, the bosses began replacing some migratory male laborers with women and children permanently settled in mining communities.³⁹

The nineteenth century also saw the advance of wage labor and an accompanying loss of workplace liberty. For example, between 1850 and

1872 highly varied and flexible contract arrangements dominated in the Huanchaca Mining Company's tunnels and shafts.⁴⁰ After 1872, however, wage labor began undercutting the autonomy embodied in earlier practices, with workers feeling increasingly distant from and exploited by the company. A nineteenth-century carnival song from Pulacayo, Potosí—a tune sung by children—illustrates the perceived chasm: “I am the little miner, sir, and I earn my bread with my labor. I have blisters on my hands and chest. The boss is harsh, and the silver that we take from the mine is never for us.”⁴¹ This antagonism between owners and miners exploded into open conflict in the twentieth century.

Silver mining's growth continued uninterrupted until 1895, when the price of silver reached a nadir following a five-year downward spiral that had begun in 1890.⁴² At the end of the nineteenth century silver faltered as the engine of Bolivia's export-oriented economy; in the twentieth century tin rose to take its place. But silver had left its mark, and subsequent labor activism among Bolivian tin miners grew from this legacy.

THE FEDERALIST WAR AND WORKING-CLASS SOLDIERS

In 1896 Fernández Alonso, the favored candidate of the incumbent Conservative Party, won election as president of the republic. He inherited a legacy of corrupt one-party rule. Fernández Alonso supported reconciliation between the nation's quarreling Conservative and Liberal parties, and because of this, both his allies and his enemies derided him as “timid” and “effeminate.” The proposed reconciliation inflamed the combative tendencies of hard-liners in both parties. By 1898 a debate about federalism and a squabble over fixing the seat of government in La Paz versus Sucre began to mix explosively with preexisting party antagonisms. On December 12, 1898, the wealthy and powerful of La Paz, primarily affiliated with the Liberal Party, declared themselves in rebellion. The Federalist War of 1898–1899 began as a dispute among the dominant classes, but in the countryside the conflict developed into a vicious rural revolt beyond the control of urban leaders.⁴³