

Potosí:
AN EMPIRE OF SILVER

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AS RICH AS Potosí is a comparative phrase used by miners of the Western world. Even Cervantes alluded to these riches in his *Don Quixote*. The now almost legendary silver mines in the Alto Plano of Upper Peru (now Bolivia) provided the name for subsequent mining districts in Mexico and the United States.

The wealth of the Potosí silver mines, though never adequately measured, was very real--something over a billion dollars or maybe several times that amount. Though the King of Spain received his *quinto*, considerable silver by-passed the bureaucracy on its way to Europe. Spanish treasure galleons were subject to piracy and storms and much of the royal fifth which reached Cadiz was promptly seized by creditors of the Spanish crown. Of the remainder flowing to the treasury, King Philip II's army in the Netherlands absorbed a substantial portion.

The discovery of rich silver ore on a lofty, barren mountain was made by a Quechua Indian in 1545. Previously, however, a native ruler had found silver on the same high mountain (el. 15,827 feet) but all thoughts of wealth were quickly destroyed when a roar of thunder was followed by an ominous voice commanding the local ruler to leave the silver veins for future prospectors to discover. From then on the mountain was named Ppotojsi, the Aymara Indian word for noise. It became Potosí and the settlement, established about 2,000 feet below the summit, adopted the same name.

Stories of the very rich ore spread rapidly and a silver rush ensued with people flocking in from all over the world. Local Indians were recruited as miners but the dangers and the exhausting work made it difficult to hire laborers. Some natives worked on a contract basis and shared the riches with the mine owners.

In the first two decades of production, the ore was so rich that the silver was extracted by smelting in small, portable furnaces which were turned to capture the

blast of the wind according to its direction. At night, the flames of 12,000 small furnaces scattered over the hills created an impressive sight. Also impressed by the flow of silver into the royal treasury was Charles V of Spain who declared Potosí to be "La Villa Imperial de Potosí."

During the initial 25 years, an estimated \$250 million of silver was produced which depleted the available rich surface ores and confronted the miners with a profit-crunch. It also reduced the flow of silver to the royal treasury so Viceroy Francisco de Toledo was sent to Potosí in 1572. Over the objections of the local mining men, he insisted that the "patio process" be employed in the reduction of silver ore. Invented in Pachuca, Mexico, in 1557, this process consisted of crushing the ore to a fine slime, then mixing it with salt, bluestone and mercury and spreading the mass over a courtyard. After horses or mules had tramped over the mixture for several weeks, it became properly amalgamated. The mass was then roasted, the quicksilver retorted and the silver drawn off.

The patio process contributed greatly to the prosperity of the booming city; indeed the next 75 years constituted the "golden age" of Potosí. The same viceroy built the Casa de Moneda (Royal Mint) and rearranged the meandering streets. The population of the Imperial City rose to around 160,000 people; in all probability, it was the largest city in the western hemi-

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sphere. Making up the population were about 3,000 immigrants from Spain, 40,000 others from Europe and 76,000 Indians. The working force was largely Indians drafted from distant villages under the objectionable "mita" system. The drafted workers were paid varying amounts according to their occupations and during idle periods they were allowed to engage in the same or other kinds of employment.

Notwithstanding the geographic isolation, the luxurious life style of the very rich--and rich in Potosí was said to have been rarely surpassed anywhere in the world. Extraordinary sums were spent for clothing and jewelry fabricated in Europe and sent by ship to Buenos Aires where merchants' caravans continued transporting items northwesterly through Tucuman on the way to Potosí. Another trade route crossed Panama with sailing ships to Lima (Callao) and then by llama trains slowly climbing the mountain trails to the city of La Paz which traces its origin as the half-way point to Potosí.

In the Imperial City there were 14 dancing schools, 36 gambling houses and other forms of recreation. Among the more accomplished and beautiful cortesans, Dona Clara was probably the most elegant. Her house was bountifully supplied with servants of several races along with vast amounts of gold, silver and jewels. But the tide turned and she vanished from the scene of wondrous splendor only to surface as a common beggar at the age of 92.

The affluence of the community was reflected in the lengthy and costly civic celebrations following the demise of a Spanish emperor or the crowning of his successor. Chroniclers of the first two centuries of the life and times of Potosí tell of many crimes against the citizenry but to what extent the untold wealth played in this scene has not been adequately resolved.

The expanded mining activity stimulated additional stamp mills which were powered by water carried in aqueducts from dams in the mountains east of Potosí ten miles or more away. Completion of the first aqueduct in 1577 was good cause for a week-long celebration. More dams and waterways were built and by 1621, there were 136 ore reduction-works in operation.

An internal war in Spain reached across the Atlantic and forced closure of many Potosí mines. Another blow came in March 1626 when the Caricari dam gave way during heavy rains and destroyed many reduction works. A loan from the Spanish government helped to restore the mills and once again the busy life of Potosí returned and continued for seven years. It was after the debase-ment of coinage in 1650, the third major blow in as many decades, that Potosí's vigor began to diminish.

Still mining continued on an important scale. The Cathedral of San Francisco, begun in 1547, was finally completed at the end of the next century principally because of strong financial support from Sr. Quiroga,

the wealthy owner of the Cotamitos mine. (The royal share of this mine's output was said to be \$21 million.)

Commencing in 1693, mine production began its downward trend. The population of Potosí, already shrunk to less than half of its former size, was further reduced by the plague which swept across Peru in 1719-20.

Silver mining continued during the next two centuries at a lower pace but sufficient optimism prevailed so that a second or new Casa de Moneda was completed in 1773 after twenty years of construction. It was a grand structure and has been described as: "*Esta edificio es el más costoso y gigantesco que ha dejado el coloniaje en Bolivia.*"

Mining activity was handicapped because water in the shafts barred access to the lower levels believed to contain rich ores and the several efforts to drive drainage tunnels were largely unsuccessful. The War of Independence suspended mining in 1809 but the production of the previous decade totaled \$32 million, certainly a handsome residual figure for a 250-year-old mining district.

During the fall of 1825, Simon Bolivar has honored many times during his seven weeks in Potosí. With peace restored, an English company took steps to re-open the mines of Cerro Rico de Potosí. Unfortunately a financial panic in Britain the next year halted all work and a shipload of mining machinery was abandoned at a Pacific Coast port.

Potosí's population had dwindled to about 10,000 by the 1880s. Mining activity had been at a low ebb for many years until another English company came on the scene in 1883. This effort was disappointing as little was accomplished. Arthur F. Wendt, a well-known mining engineer of New York, went to Potosí in the fall of 1886 and, after spending a half-million dollars to un-water and develop the old Cotamitos vein over a three-year period, he was able to produce an unspecified amount of ore yielding 75 ounces of silver to the ton.

A major change occurred around 1890 when mineral production in the Potosí district switched from silver to tin. (The great tin fortunes of Simon I. Patino began in 1896 when he acquired La Salvadore mine at Uncia, southeast of Oruro.) A major force in the revival of Potosí was Luis Soux who came to Bolivia from France in 1883 at the invitation of Aniceto Arce, the man who directed the construction of the first railroad in Bolivia and who later was president of the country. In 1891, don Luis Soux formed Doupleich-Soux & Cia. and in 1895 built the first modern smelter in Bolivia. The firm became Soux & Hernandez as this century began and then Empresa Minera Luis Soux. Since 1921 it has been known as Cia. Minera de Potosí, S.A. and is still managed by the Soux family. J. Aitken Soux, grandson of don Luis Soux, was president from 1966 to 1968;

currently the position is held by his sister. The company remained independent when the larger tin mines were nationalized in 1952 with the formation of Corporation Minera de Bolivia (COMIBOL).

Railroads approached Bolivia slowly from the sea with the first railroad construction in 1889 and a lapse of almost twenty years before La Paz was linked with the Pacific Ocean by a continuous rail line to Antofagasta. Potosí celebrated the arrival of the railroad from Rio Mulato in 1912 and today there is overnight sleeping car service from La Paz to Potosí.

Potosí today is an active tin mining city and new ore treating plants have been erected recently where tin ore is partially processed before being sent to the smelter at Vinto (near Oruro). Visitors can reach Potosí by train

from La Paz or highway buses from Las Paz, Sucre, Cochabamba or Villazon. On arrival, the traveler will find paved streets, neat buildings, several hotels and the Tomas Frias University. Around the city are the broken walls of many houses and mine-related buildings constructed during the boom times of three centuries ago. In the city are historic structures, the most notable being the Casa de Moneda which is now a museum. Some parts of the Imperial City remind the visitor of Virginia City, Nevada, another fabled silver mining city. The basic pattern of the history of gold and silver mining towns of Mexico and the Western United States is often similar to that of Potosí but only a small number have the good fortune to possess a second mineral in abundant quantities to cause a strong revival.

