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Luis Capoche's *General Description of the Mining Camp and Imperial Villa of Potosí, and of the Most Pressing Things for its Governance* (1585) With supplementary documents relevant to the early history of Potosí.

[Luis Capoche, Relación general del asiento y Villa Imperial de Potosí y de las cosas mas importantes a su gobierno, dirigida al Excmo. Sr. don Hernando de Torres y Portugal, conde del Villar y virrey del Perú. 1585 (from the edition edited by Lewis Hanke, published as vol. 122 in the series Biblioteca de Autores Españoles. Madrid: Atlas, 1959). Original ms. in AGI Charcas 134]

Supplementary Documents:

'The mines of Potosí: the miserable condition of the Indian miners,' in letter of 1 July 1550, Fr. Domingo de Santo Tomás to the Council of the Indies (in José María Vargas, Fr. Domingo de Santo Tomás, defensor y apostol de los indios del Perú: Su vida y sus escritos. Quito: Editorial Santo Domingo, 1937, pp.15-21. Orig. ms. in AGI Lima 113)

- 1. 'Account of the Mountain of Potosí and its Discovery.' [Relación del Cerro de Potosí y su Descubrimiento, 1572, Rodrigo de la Fuente Santangel, clérigo presbítero (in BAE 185 1965, 357-61, orig. in Biblioteca Nacional Madrid, ms. vol. J.58., 6ff.)]
- 2. 'A Very Particular Description of the Mountain and Mines of Potosí, and of their Quality and Workings.' [Relación muy particular del Cerro y minas de Potosí y de su Calidad y labores, por Nicolás del Benino, dirigida a don Francisco de Toledo, virrey del Peru, en 1573 (fragment of an account with preceding letter, also in BN Madrid Mss. vol. J.58, ff.26-32.]
- 3. 'Description of the Villa and Mines of Potosí in the year 1603.' [anonymous in BAE 185 1965, 372-85, and start of Hispanic Society of America ms. with accompanying images]
- 4. 'The Eighth Wonder of the World.' Selections from Fray Diego de Ocaña's *Viaje por el Nuevo Mundo de Guadalupe a Potosí*, *1599-1605*. [see also his sketch of the cerro]
- 5. 'Of the Rich and famous Mountain of Potosí and of its grandezas' and 'Of the Imperial Villa of Santiago de Potosí.' Selections from Martín de Murúa's *Historia General del Perú*, 1616 (Getty Manuscript). [see also the colored image from the Galvin ms.]
- 6. 'How the mines of Potosí were discovered.' 1553. Selections from Pedro de Cieza de León, *Crónica del Peru, Primera Parte*. ed. Franklin Pease G.Y. Lima: PUCE Fondo Editorial, 1984, pp. 288-93.

- 7. 'Of the Hill of Potosí.' c.1605. Reginaldo de Lizárraga, *Descripción del Perú, Tucumán, Río de la Plata y Chile*. Ed. Ignacio Ballesteros. Madrid: Historia 16, 1986, pp. 222-33.
- 8. 'Of the richness of silver ores in this province...' Lic. Pedro Ramírez del Aguila, from Noticias políticas de Indias y relación descriptiva de la Ciudad de La Plata metropoli de las Provincias de las Charcas y nuevo Reyno de Toledo en las occidentales del gran imperio del Pirú. 1639. trans. Jaime Urioste Arana. Sucre: División de Extensión Universitaria, 1978. [orig. ms. in Lilly Library, Bloomington, IN]

'Relacion de los agravios que reciven los indios que ay desde cerca del Cuzco hasta Potosi...' P. Antonio de Ayans, SJ, 1596. [in ed. Ruben Vargas Ugarte, Pareceres juridicos en asuntos de Indias. Lima: 1951, vol.37, pp.35-88. Vargas U. gives no source for this one, so we don't know where it is. With Lima Jesuits?]

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(31 Oct. 2010 - 25 May 2016 - most recent addition is Ramirez del Aguila, add next BAE items on ores and refining processes; Grandezas...)

Frontispiece: Martín de Murúa's 1590 image of the Cerro Rico de Potosí with pillars held by "El Inca" (Galvin Ms. f.141v.)

Introductory Study

"Such is the power of money, for the sake of which men do and suffer so much."

- José de Acosta, describing Potosí in his c.1590 *Natural & Moral History of the Indies*, Duke UP ed., p.181

According to several Spanish writers it was early in the year 1545 that a native Andean man known either as Gualpa or Guanca happened upon an outcrop of silver ore while chasing either a llama, a guanaco, or a deer up the side of a conical red peak in the southern highlands of what is today the landlocked Republic of Bolivia. The reddish mountain, possibly known as Potoc'chi, was not terribly high by Andean standards, but at just under 5,000 meters above sea level it did command an impressive view. The horizon was dominated by lumpy, barren puna, with glimpses of vast salt flats framed by distant cordilleras. According to most early accounts, there was no evidence of Inca or other pre-Hispanic mining activity on the red mountain's flanks. Not far off, about a half-day's journey southwest, were the former Inca mines of Porco, where Gualpa or Guanca was working as a *yanacona* or personal retainer for his Spanish overlord, whose surname was Villaroel. Porco's silver mines were rich, but most had quickly flooded due to the high water table, driving up costs and diminishing returns.

It was standard Spanish practice in the Americas following classical and medieval religious examples to say animals had led innocent native youths and maidens to treasure, which the civilized and worthy Spanish themselves then benefited from and put to good use. Fortunately, we have an account that seems to be from Mr. Gualpa himself, or as close to him as we may get. In 1572, on orders of just-arrived Viceroy Francisco de Toledo, a Spanish priest interviewed the nearly seventy-year-old man as he lay dying in his home. He was by this time known as don Diego Gualpa, the 'don' signifying noble ancestry. He claimed to have been from the Cusco-area province of Chumbivilcas, a retainer for the ill-fated Inca Huascar, a keeper of sacred feathers. He was also at Cajamarca, he said, when Francisco Pizarro and his followers captured the Inca Atawallpa in November of 1532. The namesake Gualpa there attached himself to a Portuguese soldier who used him but also protected him and he ended up in Porco mining silver a few years later. (see Matienzo cap. 8 on Porco/Potosi yanaconas vs. other types)

Gualpa was indeed a yanacona, and he claimed that he and others routinely passed the hill or mountain of Potosi (he does not call it Potoc'chi) on their way back and forth between Porco and La Plata, or Chuquisaca, a more temperate town and soon to be regional capital on the eastern slope of the Andes. Gonzalo Pizarro, the marquis's younger brother, had even ordered some test diggings opened low on the mountain's slopes, but they had not produced results. The occasion Diego Gualpa gave for his discovery of the great mines of the Cerro Rico was that he and a friend had been sent to the mountain's summit to search for an offering, or huaca, dedicated to the mountain's spirit. The pair did indeed find an offering, he claimed, which they removed and took down the hill to deliver to their Spanish masters. Presumably it included gold and silver objects, but the testimony offers no details.

On the way downhill the two were separated, according to don Diego Gualpa, who said he was hit by a gust of wind so powerful it flattened him and nearly knocked him out. As he lifted himself up he saw that one of his hands was marked by a greasy, dark soil that he recognized right away as pay dirt. He brought several pounds of it to Porco to refine and found it quite rich, but his current master and other Spaniards were not convinced that the ore had come from the hill already called Potosi. Finally, one Spaniard accompanied Gualpa back to the hill, but again the wind kicked up, and was soon so fierce that it dashed the Spaniard to the ground and blew off his hat, angering him so much that he began to beat and curse Gualpa. The two soon returned to Porco, where word of Gualpa's discovery reached the man called Villaroel, a Spaniard who moved quickly to stake claims, aided by his yanacona named Chalco. No llamas nor deer nor upturned roots appear in Gualpa's story, but wind figures prominently. Wayra, the Quechua word for wind, would continue to be providential in Potosi for several decades. Yet even this seemingly native account of Potosi's discovery smacks of Catholic legend, of the innocent yokel who witnesses an apparition, only to struggle desperately with supposedly learned authorities to prove it. (thank Ken M. for this, via W. Christian)

The first Spanish conquistadors in the Andes, including the brothers Gonzalo and Hernando Pizarro, had been led to the Porco mines soon after the fall of the Inca empire, and in 1545, when Gualpa found silver ore on Potoc'chi, the so-called Peruvian Civil War

was in full swing. We learn from several testimonies that the early miners of Potosi were pillaged by both crown and rebel forces. The uprising ended in 1548 with the capture and execution of Gonzalo Pizarro. The citizens of Potosi and Porco henceforth went out of their way to proclaim their loyalty to the crown, and one of the Rich Hill's four major veins was named for the royalist captain Diego Centeno, killer of several Pizarro partisans. Pedro de Cieza de Leon's iconic woodcut from about 1553 shows a severed head on a pike in the town's main square. The square and adjacent streets, later known as 'the little cobbled bit' (el empedradillo), would continue to serve as a theater of violence, particularly for Spanish men anxious to defend their honor.

After the Civil War, Hernando Pizarro was exiled to Spain, where he lived for decades under house arrest in Medina del Campo with his wife and niece, Beatriz, daughter of half-brother Francisco Pizarro and an Inca princess. Their busts can still be seen carved in stone on the Palace of the Marquis of the Conquest, on Trujillo's main square. Their coat-of-arms depicts native Andeans chained to each other by the neck, an unusually blunt assertion of dominance in an era of fierce debate over native American servitude. Mines in Porco were still listed under Beatriz Pizarro's name in 1585, when Luis Capoche wrote his great account of Potosí and its surroundings.

The image of Potosí outside Spain and its colonies - of hellish toil in the bowels of a giant mountain - was at least partly derived from the Jesuit José de Acosta's *Natural and Moral History of the Indies*, first published in 1590 and quickly translated into several European languages. Yet as Jane Mangan has noted, Acosta did not condemn or even comment on working conditions, the forced labor system established by Francisco de Toledo known as the *mita*, or any other of the grim aspects of colonial silver mining in Spanish America that fueled the imagination of Theodor de Bry and other illustrators and promoters of the so-called Black Legend. Acosta was an eyewitness, a visitor to Potosi in the first years after the establishment of the great mita, which initially drew in over 12,000 workers from as far away as Cusco. Other clerical writers were not so detached. Domingo de Santo Tomas was the first among a chorus of critics, writing of Potosí's abusive labor situation well before Toledo's time. Once in place, the mita became a perennial target of derision, and an object of incessant pleas or plans for reform. Was Potosi a gift of heaven or a man-made hell?

The truth about Potosí, never static, was somewhere between these extremes. To counter Acosta's stoical restraint, tempered only by classical moral commentary on mining in general from Boethius and Pliny, we may look to the long report of Luis Capoche, a refinery owner and longtime resident of Potosí. Capoche was one of Acosta's contemporaries and seems to have been one of his key sources for details on silver mining and refining. Some of Acosta's descriptions are uncannily similar to Capoche's, and indeed he seems to have been plagiarized by others who came after. Capoche includes one of Acosta's learned opinions on a matter of debate in these years, the indigenous practice of bartering bits of ore taken from the mines on their own account. Capoche's drawings, unfortunately, are lost.

Historians and Potosi

Few cities, and certainly no mining camps, were as iconic as Potosí between the sixteenth and nineteenth centuries. Part mountain, part city, part pre-industrial mill site, even the Jesuit Matteo Ricci did not fail to mark the Cerro Rico of 'Pei-tu-hsi' on the world map he prepared for the Ming emperor in 1602. The glory, or 'grandeza,' of Potosi was slow to fade even as its mines sputtered and fell to ruin by the early eighteenth century. Over 200 years later, Simón Bolívar bravely conquered the same Cerro Rico, symbolically ending the long struggle for Spanish South American independence. The legend of Potosi has been dusted off and burnished many times, its global importance taken for granted, yet Potosi's long and complex colonial or early modern history remains surprisingly little known. Have scholars been remiss?

Not exactly. Despite a number of lingering questions, Potosi's colonial historiography is rich and varied. Between the 1940s and 1960s, historians Gwendolin Cobb, Lewis Hanke, Gunnar Mendoza, and Alberto Crespo began to shed light on interregional trade and social conflict in early colonial Potosi. Although their studies were somewhat narrowly focused, Cobb and Crespo relied on primary sources to build their narratives. Even so, neither used documents housed in Potosi itself. Cobb used published sources, such as Juan de Matienzo's c.1570 *Gobierno del Peru* and Roberto Levillier's massive collections of materials relating to Viceroy Francisco de Toledo, and Crespo worked with items in the Bolivian National Archive in Sucre sorted and annotated by Mendoza, along with some items from the Archive of the Indies. Another key part of the Potosi puzzle was largely figured out by Peruvian historian Guillermo Lohmann Villena, whose 1949 history of the mercury mines of Huancavelica - Potosi's lifeblood - remains standard.

In 1956, Lewis Hanke pointed to potential lines of inquiry in a short book. He pursued a few of these in brief articles in subsequent years, but mostly he devoted his energies to publishing manuscript sources. In 1959, Hanke and Mendoza collaborated on an annotated transcription of Luis Capoche's 1585 description of the mountain, city, and hinterland (the basis for the current translation). Published in the popular Biblioteca de Autores Españoles series, this volume was followed by another in 1965 including fragmentary descriptions of Potosi from the Archivo General de Indias and other Spanish archives.

Also in the early 1960s, Argentinian historian Carlos Sempat Assadourian was pursuing Potosi's trade linkages to Buenos Aires via Cordoba, an important Atlantic-interior corridor by 1590. He was already formulating his theory of mining-centered colonial development, a counterpoint to then-fashionable models of underdevelopment derived from dependency theory. The Brazilian historian Alice Canabrava and French historian Marie Helmer were also working out Potosi's South Atlantic connections, illuminating Luso-Brazilian trade ties and developing aspirations following the 1580 Luso-Hispanic union. Charles Boxer also approached the Cerro Rico from Brazilian territory with his biography of Governor Salvador de Sa. Brazilianist Bailey Diffie was among the first to attempt a summing up of early Potosi silver production using smeltery ledgers housed in Seville, a task carried forward by Peter Bakewell and pursued on a larger scale by John TePaske, Herbert Klein, Kendall Brown, Engel Sluiter, and others. Potosi's first-century

production figures had to be compared to precious metals receipts in Spain, tallied most famously by Earl Hamilton in the 1930s.

Hanke and Mendoza's monumental 1965 publication of Bartolome de Arzans y Orsua's c.1736 History of the Imperial Villa of Potosi perhaps marked the culmination of this first wave of scholarship, focused as it was on getting important raw material published and sketching the general contours of Potosi's colonial past plus some of its regional trade connections. R.C. Padden was inspired by the 1965 volumes to translate and annotate some of Arzans's most picturesque stories in 1975 under the title Tales of Potosi. The cultural and literary history of Potosi seemed to be budding, but there were as yet few takers.

In the next wave of historical inquiry, beginning in the 1970s, Peter Bakewell, Jeffrey Cole, Enrique Tandeter, and Rosemarie Buechler published landmark studies of labor and production based on extensive archival research. Bakewell and Cole focused on the Habsburg-era mita, and Tandeter and Buechler examined this infamous labor draft and other economic matters in the Bourbon era, when the mines underwent a substantial revival. Bakewell used Luis Capoche as a key source for how mining and refining were carried out by free as well as drafted indigenous workers and traders in the early years, whereas Cole examined the huge volume of polemical literature surrounding the mita for insights into Habsburg colonial governance. The key players in Cole's narrative were not the Andean workers nor the viceroys (nor the priests) who routinely claimed to seek their protection, but rather the refiners, or *azogueros*, among whom Capoche would have been counted. Soon after the arrival of Viceroy Toledo in 1572, Potosi's silver refiners came to constitute a new and powerful class.

Labor and bureaucracy were not the only things of interest in Potosi, and in 1987 Peter Bakewell published a biography of seventeenth-century mining and commercial magnate Antonio Lopez de Quiroga, one of the Spanish colonies' richest men. He thrived, as some businessmen do, in an era of crisis; dozens of mines were closing and draft workers were disappearing. By buying up abandoned diggings and innovating with gunpowder blasting, well-paid skilled workers, and long-term investments in drainage tunnels, the Galician Lopez de Quiroga went from silver merchant to arguably the greatest single silver producer in colonial Spanish American history, certainly before the rise of Mexico's magnates of the late eighteenth century, especially the Count of Regla.

The thrust of Bakewell's work was colonial entrepreneurship, another counterpoint to dependency theorists' claims of underdevelopment and backwardness at the so-called periphery of the modern world-system. A painstakingly thorough researcher, Bakewell scoured every archive for material relating to Lopez de Quiroga. Meanwhile, Sempat Assadourian continued to use studies of commerce and innovation in Potosi to challenge claims of underdevelopment throughout the Andes and eventually much of Spanish America. He argued that silver mining was a reliable motor for economic development.

One of the most significant contributions to the history of Potosi was the collaborative work of Tristan Platt, Olivia Harris, and Therese Bouysse-Cassagne. Qaraqara Charka

Aside from the work of art historians such as Teresa Gisbert and a few numismatists, no monographic study of colonial Potosi appeared until 2005, when historian Jane Mangan published a breakthrough study of small-scale trade and food production in the Habsburg era. It was the first book-length work to exploit Potosi's own notary records in depth, and also the first to go beyond the 'tall tales' of Arzans in treating the history of women. Mangan brought to life a city whose majority indigenous population literally pulsed with commercial activity, much of it involving the trading of raw silver ore for maize beer, or chicha, as well as bread, soup, and other victuals. Women of indigenous and mixed background fed the laboring masses, but also made strides toward capital accumulation as entrepreneurs and social advance as members of religious confraternities. This sometimes pitted them against striving male shopkeepers, or pulperos, many of whom were Spanish.

Despite this considerable body of work, supplemented recently by Kenneth Mills, Kendall Brown, Consuelo Varela, Alan Craig, Nicholas Robins, Emma Sordo, and David Dressing, there remains a general ignorance of the basic history of Potosi. This is hardly the fault of the several generations of historians just listed, and I urge readers to consult their invaluable work.

The purpose of the following translation of Luis Capoche and other early observers and visitors is to reintroduce readers to the mines, camp, city, and surroundings via the earliest and most reliable firsthand descriptions. They are fragmentary and never objective, but in aggregate they help paint a picture of one of the world's most unusual cities. In the seventy-odd years between 1545 and 1616, Potosi was transformed from an uninhabited wilderness to a thriving and, by some measures, world-class metropolis. The Cerro Rico looming over the Imperial Villa was instantly iconic because it was the fountainhead of the world's first great silver age.

Mining

There was a lot going on in and around the Imperial Villa, but the business of Potosi was always mining. Without it, the city would not have existed. One of the great strengths of Capoche's account is its timing: he wrote as production was peaking. Another strength of the narrative is the author's perspective: Capoche was a local resident who was neither a priest nor a government official. Nor was he a mine owner. He did have a bias, that of a mill owner dependent in part on allotments of mita workers and crown-subsidized mercury (hence the term azoguero), but Capoche's descriptions of mine labor and mining conditions are neither overly enthusiastic nor overly negative. He treats mining as the fact of life in Potosi that it was, yet unlike most locals he describes it in extraordinary detail while also offering some of the most astonishing accounts of mine hazards that we have for early modern times. Put another way, Capoche presents himself as a sympathetic observer who has been underground enough times to understand the goings on, yet without losing his sense of wonder or shame.

Places

Capoche does not only describe the mines of the Cerro Rico, but also the older ones of Porco and the newer ones of Guari-Guari, Los Lipes, and Berenguela. He even describes the salt springs and deposits that provided the city and mills with this critical reagent in the amalgamation process. For Capoche, Potosi is itself something like a mill, a great machine made up of many interlocking and interdependent parts. Other observers picked up on this theme, but none described it so carefully. The mountain was not simply 'a mine,' as it would be depicted by Theodor de Bry and others who had never seen it, but rather a dual world of subterranean and above-ground activities centered on mineral extraction and selection but including market exchanges, religious rites, consumption of commodities such as coca, chicha, tallow, cloth, and hides. The mountain was thus divided: adult Amerindian male within and Spanish male, Amerindian child, and Amerindian woman without. The mountain crawled with llamas carrying ore and supplies, but there were also hundreds if not thousands of women bringing food to their menfolk, plus children scavenging for ore to barter in town.

The Villa or Spanish town was not just the Imperial City with its slowly emerging stone piles and numerous market squares but also the much more extensive Andean townships, or rancherías, several of them pushing up the hillside.

Above the city and arcing around the Cerro Rico was another cog in the great machine, the string of dams and reservoirs heading up to the Guari-Guari mountains, built by drafted Andean workers on Toledo's orders and with the investment of mill owners such as Capoche. These reservoirs banked rains during Potosi's short wet season and channeled the waters flowing into the city's main gulch, known simply as La Ribera, through a series of aqueducts feeding over 100 ore-crushing mills and their elaborate refining complexes. Water was power, but the dams were also a liability, as was discovered when one burst in 1626 and the resulting deluge carried away a large portion of the town. Greed directed investments, and cutting corners had other costs. Fountains to provide fresh water to the tens of thousands of inhabitants flooding into the rancherías were an afterthought, Capoche notes: 'a useful idea for the public good.'

Refining

'Here there are found the best engines and machines and artifices ever made in the world.' (Aqui estan los mejores ingenios y maquinas y artificios que en el mundo nunca se han feito.)

-Pedro de León Portocarrero, Descripción del virreinato del Peru, p.91.

If Capoche's descriptions of mines, marshes, and salt pans occasionally fall short on details - and they rarely do - it is in describing his own business, that of refining a wide range of silver ores into fine ingots, that he gives us something truly remarkable. Mercury amalgamation on a scale not seen before in human history is laid out in Capoche's narrative for the king to see. Appalling, yes, but also a technical marvel as varied in form as the silver mines themselves. Late sixteenth-century mills varied in size and type, some powered by the 'blood' of animals, others by falling water. Newfangled innovations in milling and refining caught the imagination of gullible and inexperienced owners, but as

with most such things these usually failed. Conservative mill owners like Capoche tended to keep perfecting simple and trusted designs, reducing risk or exposure by renting some machines and purchasing ore futures when miners were needy (see notary records from Moneda here).

As the British historian of science Jonathan Sawday (2007, 5-6) has noted, early modern European machines were generally loud and cities were frequently polluted by fulling mills, tanneries, smithies, and other proto-industrial operations. But Sawday is most relevant here because he devotes considerable attention to the central European mines and milling devices described and illustrated by the German engineer Georgius Agricola, whose treatise De Re Metallica circulated in the Spanish world. Yet Sawday does not venture abroad to the New World, where these technologies were tried on a new and unprecedented scale - alongside significant urbanization in the case of Potosi.

In reading Capoche and other observers from his era, we realize that Potosi was possibly the loudest and most polluted city of the early modern world. Over a hundred great milling 'engines' rumbled day and night, this without including the blacksmith shops, the bakeries, or the mint. Aside from ordinary smoke from burning dung and charcoal, ovens spewed fumes heavy with lead, zinc, and other metals. The Cerro Rico of Potosi may have resembled an anthill, but the villa imperial was a city of engines. The hot springs of Tarapaya created a nearby annex of a few dozen mills, but most were clustered along the channel that ran through the city. Ores were heavy, and the mills' products dear, so it made sense to keep them close at hand.

As described by the visiting priest Diego de Ocana about 1600, Potosi - mountain, city, reservoirs, aqueducts, people, and beasts - constituted a great machine. Potosi's mills were supplied by canalized water stored up in a series of reservoirs. Salt springs provided reagents, distant woods provided charcoal, farms and vineyards provided food, beer, coca, and wine. The countryside and even the city were so scoured of resources that not only llama dung but also human feces were collected and sold as fuel to smelt silver. Inside the mines human excrement was left as food for the gods to turn into more silver. Thus Potosi became the true motor of empire, an engine and organism that ate shit and shit silver, 'la maquina cacaplata.' The chronicles are full of these wondrous and awful inversions. On the outside the mountain is a tit or a womb, but inside it is a world of male demons. The Cerro Rico was also the Tower of Babel in reverse - not built, but rather excavated. Indeed, Ocana marveled at how 'the machine' of the mountain did not collapse after so much excavation.

Trade

Another huge wheel driven by the machine of Potosi was commerce, with silver in several forms serving as grease, stock, and fuel. Trade was not monopolized by the Spanish, Capoche reminds us, and we meet some remarkably rich indigenous traders to match the independent men and women operating wind furnaces. There are also the indigenous market women whose experiences Jane Mangan has illuminated, along with Spanish pulperos, consigners, and wholesalers. Potosi was a merchant's paradise,

incapable of feeding, clothing, and sheltering itself with local produce, and rich enough to buy much more than necessities. Notary records from Capoche's time burst with merchant inventories and supply contracts - for coca, wheat, maize, lard, and charcoal.

Potosi was an improbable place for such a vibrant market in global commodities, almost like building a new Seville on top of Pike's Peak. And yet it worked. Why? Because despite the altitude, Potosi was still in the tropics, and this meant that it never experienced a genuine winter, with persistent darkness and lingering snows. The dry season was colder than the wet, but not by much. The length of days varied some between these seasons as well, but not by much. Sometimes it snowed, but it never stuck, and most frosty nights were offset by brilliant days - even if the sun shone cold.

Local commodities were equally important, be they food, fuel, or clothing. Just as important as these 'bare necessities' were stimulants, most critically for indigenous potosinos coca and chicha, and for Spaniards, wine and (in time) tobacco. Mate herb from Paraguay also appears early, and chocolate a little bit later. Distilled spirits only figured after the mid-to-late seventeenth century, when local brandy and white rum production became commercialized.

Spectacle

Capoche sometimes offers his own opinions, especially with regard to the matter of native ore bartering, a much-debated topic at the time he wrote, but the document is generally clinical and detached in tone. Capoche does not say much about daily life in the Villa Imperial outside market exchanges and labor roundups. For this aspect of Potosi in its productive heyday we turn to Diego de Ocaña, a Jeronymite priest visiting for an extended stretch at the turn of the seventeenth century to hustle alms for his sponsors at the shrine of Our Lady of Guadalupe in Estremadura (Mills, Colonial Saints).

Ocaña offers vivid firsthand descriptions of the mines and mills, but his specialty is fiestas. Long before the better known Acarete du Biscay (c.1658) and Arzans y Orsua (c.1736), Ocaña described Golden Age Potosi's festival culture in cinematic detail. His writing pulses with the excitement of the day, and brings to life the mix of sights, sounds, and smells that overwhelmed onlookers as fantastic creatures rolled through the cobbled streets on creaking carts and painted devils thundered past on swift mounts, fireworks exploding and fistfuls of coins dropping to the ground to excite the greedy. There is no one quite like Ocaña, a priest whose instincts tended more toward the picaresque than the polemical.

On Capoche, Benino, and Ocaña

We know almost nothing about Luis Capoche beyond what he says about himself in this description of his adopted Andean town. His name sounds more Italian than Spanish, possibly 'Capocci,' but he appears to have grown up in Seville, where he claims to have seen as a boy the house of one Juan de Marroquí, developer of the clay guaira, or modified indigenous wind furnace used at Potosi before the introduction of mercury

amalgamation. A Juan de Capoche from Seville shows up in the Pasajeros a Indias list for 1566, headed to Peru. Perhaps this was a relative.

Capoche also refers to Spain as 'our nation,' which suggests he considered himself a full-fledged subject and patriot. Certainly Capoche was as 'Spanish' as almost anyone in Potosí in the sixteenth century, and the city was already famous for its diversity, not only of Europeans but of native Andeans and Africans. 'Spaniards' soon divided into Basque and other camps, creoles or locally born Europeans soon making up the better part of the so-called vicuña faction. Crespo and Dressing have done much to illuminate the dramas that eventually developed along these lines.

On Matienzo

Gobierno del Peru is an odd text. It contains descriptions in the relaciones geograficas mold, but it blends in laws, or suggested laws, prefiguring the famous ordinances of Matienzo's successor, Francisco de Toledo. There is much on Potosi, but what stands out is Matienzo's description and defense of the trade in coca leaves. In chapters 44-50 describe its production and commercialization, and chapter 51 is a list of proposed laws governing both.

The Texts

Acknowledgements

Casa de la Moneda - Potosi, Kenneth Mills, Mellon Foundation, LAL-Tulane, Huntington Library, RMCLAS Park City 2012, University of Minnesota's Center for Early Modern History, AGI, Biblioteca Nacional.

Timeline

- 1532 Inca Atawallpa captured by Francisco Pizarro and followers at Cajamarca
- 1538 Spanish take over Inca silver mines of Porco
- 1545 indigenous prospector Gualpa discovers silver ore on Potoc'chi hill
- 1548 Gonzalo Pizarro executed, ending Peruvian 'civil war'
- 1554 Bartolomé de Medina develops amalgamation process in Pachuca, Mexico
- 1556 Philip II crowned King of Spain and the Indies
- 1564 discovery of mercury mines at Huancavelica, Peru
- 1569 Viceroy Francisco de Toledo arrives in Peru
- 1572 Viceroy Toledo formalizes mita, amalgamation process, and water supply to Potosí
- 1575 Viceroy Toledo establishes Potosí mint
- 1578 mita draft for Potosí reaches 14,296 native Andean males
- 1581 Toledo replaced by Viceroy Martín Enríquez
- 1585 Luis Capoche composes his description for incoming viceroy Conde del Villar
- 1590 Villar replaced by Viceroy Marqués de Cañete
- 1592 Potosí reaches peak production, begins long decline

1596 Cañete replaced by Viceroy Luis de Velasco

1598 death of Philip II, accession of Philip III

1603 anonymous description of Potosí with image of mountain and city

1606 discovery of silver mines at Oruro

1621 Philip IV crowned King of Spain

1621-24 'war' between Basques and 'Vicuñas' in Potosí

1626 dams of Cari-Cari burst, killing hundreds and destroying mills

1649 Potosí mint scandal breaks, leading to executions

1650 Potosí coins devalued throughout Spanish empire, causing financial havoc

1660 murder of Potosí mita superintendent Francisco de la Cruz

1665 Charles II crowned King of Spain

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[dedication]

To the most Excellent Lord don Hernando de Torres y Portugal, count of Villar and Viceroy of Peru, my lord...

First part of the account of Potosí

Description of the mountain and city of Potosí

The mountain and Imperial City of Potosí are located in cold country, with many snows, sterile and fruitless, and almost uninhabitable due to the harsh and foul weather. Before the discovery of the mountain there were no inhabitants because of the poor climate. It is dry and cold by nature, and extremely gusty, especially in May, June, July, and August, when harsh winds kick up called *tomahavis* (as they come from a town of that name); they are impetuous and arrive extremely cold and with so much dust and sand that they darken the air and cause much ill humor, although they are not sickening. It rains very little in this town and the rains come only toward the end of November, and are strongest in January and February. They are gone by early March. Not a single variety of food is grown in the town or nearby save a few potatoes (produced like truffles in the earth) and barley sprigs that yield no grain, as the cold is perpetual, and in this it exceeds that of Old Castile and Flanders in that there is never a time in which the elements find peace and balance among themselves so that the land may give fruit to the man who possesses it. And it is rugged and barren, without a single grove of trees or greenness. Its location is 21 & 2/3 degrees south of the Equator, and although in the tropics it is cold when it ought to be temperate and hot like the other lands at this latitude, but this is prevented by the loftiness and great elevation of this land and also by the intemperate winds with which it is bathed.

To the east of this mountain some 170 leagues, with respect to us, lies the province of Santa Cruz de la Sierra, wherein are found the last towns subject to Peru. And continuing straight ahead is the North Sea and coast of Brazil, with the great River Plate which tends

toward the southeast, and at the first brackish waters that come up the river there is the settlement and port of Buenos Aires, from here 430 leagues [divided into] legs along good road. And sailing to Castile is swift and some try to go there this way, and more would do so if they were assured of finding ships, which are not always there. To the west is the Austral or South Sea, and at ninety leagues the port of Arica, stopover for Chile and where merchandise is unladed for carriage here to this city from Lima's port of Callao, and to which silver is brought from here by trains of mules and llamas to be sent to Spain by sea. To the south is the province of Tucumán, 150 leagues, and here too one finds the outermost settlements of this part, and the provinces of Chile and the Strait of Magellan, 600 leagues. Towards the north lies the heart [nobleza] of this kingdom, its principal provinces and cities. And it should be understood that this description and location of provinces according to cardinal points or terrestrial climate zones refers to whole parts and not to straight lines.

Returning, then, to the mountain, not a blade of grass grows upon it. Its color tends toward dark red, free of cliffs and crags, and exposed on its surface is silver-bearing earth and rock and rubble. The rest is bedrock. It is straight up and steep, with a sharp grade, although one can manage it all on horseback. It ends in a rounded point. At the base of its flanks it is a league in circumference. It stands separated, alone and apart from the surrounding land, although on the north part there are attached a few hills and on the west side others rise in the form and fashion depicted here [fig. lost] (which is but a sketch, reducing its greatness to this tiny representation, with the town site and churches in their proper places). From the summit of this mountain to its foot and base, measuring on the east side, one counts 1,624 common yards, which reduced to Spanish leagues comes up as one quarter of a league; and on the west side it is about 1,404 yards; and on the north side, 2,419, which is half a league; and on the south, which is the lowest, 546, which is a tenth of a league.

On this mountain, at the foot of its flanks, there is incorporated a smaller mountain, born out of it, which formerly had a few mines of loose ores which are found in pockets and which were quite rich, although few, and did not run in fixed veins. They call it Huayna Potosí, which is to say Potosí, Jr., from the flanks of which, on the north side, begins the town site of this villa, and it is 8,652 yards in circumference, which is a league and [three] fourths.

The town site is made uneven by slopes and ravines. Its buildings are the worst to be found in these parts (being as they are simple, low, and poorly laid out), and the houses small due to the coldness of the land and the high cost of living, and the availability of only poor materials, and those who dwell here being only itinerant traders who come and go with no fixed abode, and to whom the public good and improvement of towns matters little. And the main cause of its lack of splendor is its not having citizen-encomenderos, who in other parts with so much effort and valor have lent their persons, and also their wives and families, ennobling the kingdom and perpetuating it with the cities they have founded, with magnificent buildings and sumptuous houses, plus ornaments and finery for their persons. Although recently the trade in fashions has arrived in this town to such a degree that whereas one used to buy only dark woolen cloth and boots of sole leather

(as it used to be prohibited to bring silk), they now walk dressed in velvet and pressed woolens and fine stockings, and it is rare to see breeches without brocades and gold thread, and this is so common that artisans and mulattoes dress thusly. After the introduction of mercury, this city was ennobled due to the great influx of people and the marriages that have resulted. It is so curious the finery worn by the women that it could compete with all those of the kingdom [i.e., Castile].

There are squares, that of the Court of Justice and Royal Offices, plus the Merchant Exchange and royal mint and smeltery; there is also [the plaza] of coca, and three squares where they sell maize and flour, and another for livestock, and one for firewood and charcoal, and another for ore, which in its trading is something to see, as it is here that they trade the ores taken by the Indians from the mountain, or silver for silver, to put it better. Aside from these there are many other public places where great concourses of native peoples gather to hold their fairs and markets, so crowded that one can barely walk among them.

There pass through this villa and its ravines three creeks that in winter run with some velocity, and one of them, fed by the lakes, maintains its flow for five or six months. And next to the flank of this one, somewhat distant from the town, there is born a perpetual spring they call 'of Castile,' as it is so singular, such that the aficionados of this element [spring water] can satisfy their appetite without having to search for a means of drinking it cold, not because it always comes out of the spring that way, but rather once outside it chills. The natives drink from wells and suffer much necessity as they generally lack water in September and October until it rains; they do not drink from the creeks, although they run, as the water comes corrupted with the refining of ores and mercury; and thus it should be required to make wells in the parishes of each community for their sustenance, which would be a pious work and not difficult for the Indians, for whose benefit it would be.

Despite everything having to be brought in from afar, the marketplaces are well provided with everything necessary for the good sustenance of a very fertile and abundant republic, with many dainties and conserves, and well crafted and smooth wines from Castile that arrive here much purified, and there is also good fruit that they bring here from the valleys of Chuquisaca [near modern Sucre] that in this *puna* and land so cold and dry are quite agreeable and tasty.

Of the discovery of the mountain

The Spanish had been in possession of this kingdom more than twelve years without having any news of this mountain, in which time some of ours worked the mines of the site of Porco, which was the sustenance of the kingdom, and in the discovery [of Potosí] they found no sign that the ancient Incas or kings had taken advantage of its mines nor did they find evidence of works (as they had in Porco, where [the Incas] had them), and it was due to some vain observance and ceremony to which these Indians were inclined (the blind and most deluded of them adoring certain hills and singular rocks, devoting themselves to their *huacas* or shrines – which was where the Devil spoke to them and

where they offered their sacrifices, and it became well known that when the Indians of Chaqui, which is a pueblo five leagues from this city, wanted to work it, a very great pestilence occurred, which they attributed to this and thus they left it; and once the Inca knew of it, frightened by this news, he ordered that they not be worked, and the Indians heard voices in the air telling them that [the mountain of Potosí] was reserved for another, better people, and they would have to sacrifice more than them) or due to their being ignorant and not knowing of its value and richness, God having it reserved and hidden so many centuries for the remedy and rescue of our nation. And thus God made these kingdoms rich in worldly goods, knowing our inclination, so devoted as it is to these metals, because if they were lacking it would be most difficult to preach as the land is so remote and inhospitable.

The first to give news of it, by way of evidence and public register, was Guanca, an Indian native of Jauja, a *yanacona* belonging to Villarroel, who was a Spaniard residing in Porco. And before this, the one who discovered it and first took silver from its mines was an Indian named Gualpa, of the Chumbivillca nation in the land of Cusco, who, coming from the west in pursuit of some deer followed them up the mountain, and as it is steep and at that time covered with some trees they call *quiñua* and much scrub, in order to climb over a difficult passage he was forced to pull himself up by a branch that had grown right out of the vein that [later] took the name 'The Rich.' And in the root and cavity it left he encountered the ore, which was quite rich based on what he knew from Porco; and he found on the ground next to the vein several pieces of ore that had been broken loose but he was unable to examine them closely as the sun was going down and he had no water, so he took them to Porco to assay by *guaira* [the Andean wind furnace].

And as he saw its extraordinary richness, he worked the vein secretly without mentioning it to anyone, so much so that the Indian Guanca, who was his neighbor in Porco, noticed that from his smeltings he came away with better ingots than were ordinarily produced in that area, and that his person was also better adorned, as up until then he had lived in poverty. And anxious to know what was going on, he managed to examine a piece of the ore, and wondering at it he asked what mine it had come from; and Gualpa told him 'from Porco,' and that he knew no other mines, but Guanca denied this. And he questioned him so much that he had to admit what had happened, and he brought him to this mountain, now having worked it for eight months, sole beneficiary of the greatest wealth ever seen in the world. And he told Guanca to take for himself a vein he had also discovered, which was near the other, and which was later given the name Diego Centeno, no less rich, but harder to work. And with this agreement they divided the mountain between themselves. But Guanca, as he had to take out his ore with a bit of difficulty and more effort, asked Gualpa to let him work in his vein, as it was sufficient for the two of them; and since he declined they fell out with many disagreements. And upset by this, Guanca advised his master, Villarroel, who went to have a look at what he spoke of, and seeing what had taken place, he made Guanca file a claim, and together they staked out the mine later called Centeno, the registry of which was done in Porco on the 21st day of April, 1545.

And after some days they discovered the vein called The Tin, which has been exceedingly rich, although exceedingly difficult to work, its ore being as hard as bedrock. And on the 31st of August of the same year they registered the vein of Mendieta, and these are the four principal veins of this mountain. Of the Veta Rica they say its ore stuck up to the height of a lance, in the form of some crags, rising up from the surface of the earth like a crest some 300 feet long and thirteen feet wide, left that way uncovered and stripped clean by the Flood, resisting like the firmest part the impetus and force of the waters. And it was such rich ore that it contained half silver, and so leaden that when the Indians chopped at it their bars stuck in it; and they removed stringers as fat as a leg, and where these are it is a sign that the mine is very rich, as the silver is congealed and born with it [lead] as it is 'wet.' And they went on pursuing its richness some 57 statures down, after which it began to play out.

And once this discovery became known in this kingdom a great many Spaniards rushed in, including nearly all the citizens of the city of La Plata [today's Sucre], which was then called Villa Rica, taking possession of mines, and also bringing in order to work them a great number of Indians from the *repartimientos* [encomienda allotments], plus yanaconas, from all over this province and the districts of its cities, these being the first to settle, and also the guairadores [native smelters using wind furnaces] who moved here from Porco. And in a short time it became the largest settlement in the kingdom.

Of the veins found in this mountain

'Vein' refers to a band of ore as occurs in this kingdom, in the higher parts and peaks of the mountain toward the east. They run North-South. They call them this as they resemble the [veins of] trees and their wood, forming their lines or veins where the sap of the tree flows and runs, dividing the body of the wood, and they also show another gummy material that differs from the rest. In the same way, in this mountain are the veins of ore set between its earthy parts and bedrock, with that surrounding it is called encasements [cajas], and that which is in between is ore. The veins are at most six feet wide, and five and four and two, and more or less, widening at times and at other times narrowing like a palm [trunk].

The rich ore they take from the mines they smelt with the *guaira*, as they have always done, and some Indians and Spaniards refine it with mercury. And the poor ores that were not for the *guaira*, which occurred alongside, and which made up the greater part of the vein, with others so poor that they served for nothing until the introduction of mercury, they tossed aside, like a useless thing of which they expected no gain by way of smelting and result of fire. And the rich ores they refined by smelting, being unable to beneficiate and correct them with the bellows furnace, as in Porco and other places, although expert persons very knowledgeable in ore types attempted it. And it was on account of these [ores] being dry. And thus they benefited from them by *guaira*, whose smelting is more gentle and moderate, as will be described in its place.

This past prosperity was so great that the tailings, which are poor ores that they cast out of the mountain, were so rich they contained ten to twelve pesos per hundredweight [of

silver], and some of those refined with mercury contained up to sixteen. And there were so many [of these tailings] on the mountain that, from the year [15]73 until today they have not run out; and by way of these many have become rich, although it costs them nothing more than to gather them. Those who at present 'glean' [pallan] which is what they call this manner of choosing and collecting ore, and which makes up the better part of the ore they mill this year along the main creek bed – and if it were not for these there would barely be anything to mill, and without this, many [mills] would be idle. And those who mill only in exchange for transport and milling fees do so with so little benefit that this one and that one must go to [debtor's] prison or Tucumán, which is the Portugal [i.e., place of exile] of this land. And this year the tailings run two-and-a-quarter pesos, and up to two-and-a-half pesos [of silver per hundredweight], which is good milling; but these are rare, and the rest do not even yield two pesos.

Last year there was very little work in the mountain because the mine and mill owners had no means of refining [ores], as there had been two years without milling due to the lack of water; but this [year], in which Your Excellency has given favor to this kingdom by entering, has been most fertile and abundant, and all hold it as a good forecast of the happy and fortunate government of Your Excellency; this favor they have been done by heaven in this new start.

The veins are so deep, especially the main ones, that it is necessary to descend in some of them more than 200 statures in order to reach their ores.

I name below all the veins in this mountain, with a list of the persons who have mines, and the quantity each one possesses in terms of type and depth, plus the number of Indians granted by the general assessment carried out by Dr. don Diego López de Zúñiga, court magistrate of the Royal Audiencia of Lima, by order of the most excellent lord, [Viceroy] don Martín Enríquez, may he be in glory, and they were assigned them in the time of the audit by the inspectors and deputies named for this purpose (the same who made allotments according to the perceived needs of each mine they visited in terms of Indians to work and develop it, although in this there was much disorder) and according to the [number of] Indians assigned in the last apportionment by the lord viceroy. In the first column are the Indians assigned [in writing], and in the second those actually given; in the third is the number of yards [of officially claimed vein] each mine has; in the fourth is depth in statures each has, and where there is a cross it means it is a virgin mine, [not worked] due to the poverty and little understanding [its owner has] of how to benefit from it:

[...next are detailed lists from p.79-102 to reproduce elsewhere, probably as an appendix...]

Of the veins and mines that have been discovered and registered in the Cerro Rico of this city after the general assessment that ended on the ninth of March, 1582.

Antonio Contreras discovered a vein of silver ore right on top of the Medina adit [access tunnel], for which they granted him sixty yards of mine as pertains to the discoverer, and

Your Majesty took a mine [i.e., a mine was set aside for the king, on which a higher tax would be paid by the operator], and many other people staked claims.

Francisco Polanco the younger discovered and registered a vein of silver ore between the Vein of the Blind Men and that of the Flemings, for which they granted him the sixty yards that pertained to him. And Your Majesty took a mine and many persons [staked claims], and the same is to be understood in all the registries that follow, so in order to avoid prolixity I will not put the names of those who took mines or staked claims, as almost all of these are virgin mines and veins.

list cont. p.103

Diego Rodríguez de Figueroa registered a vein of silver ore, in which they found some old diggings that dead-ended, and the vein lost, having much earth and stone on top. And thus it is with many that they register as new discoveries, since those who first found them were of no consequence, and they left them, time erasing the memory of this. And other persons cover over the vein, and usually they are Indians who go grubbing over the mountain and they give notice to their masters or friends, who then file a new claim, acting as if it were abandoned, and if they happen to register it thus, or as a new discovery, either way it is in line with the royal regulation, although I understand that in the first general inspection that was done they visited more than forty veins with the many people who had taken mines in them, and this latest registry appears to have been done in October of 1584.

Of the tunnels in the mountain and their utility

One of the great inventions they have made in the mountain in order to work the mines and benefit from their ores has been that of access tunnels [adits], whose development is of great value and importance. And thus Your Excellency should mandate that great care is taken continuing it, and that the Indians allotted for this purpose remain occupied in this work, for which it should be known that the veins of this mountain are discovered on the summits and highest parts toward the east. They run North-South, the veins climbing toward the tip and crown of the mountain, with the ore and host rock toward the bottom, which is from where they originate and have their root, and as it is commonly understood, all the way to their base, and it could be more, and it may even descend more than 1,200 statures.

And they have been so firm, the host rock and ores of this mountain, that it is understood that their origin and firmament is in the base, although there is a risk in the very depths of hitting water, yet as the mountain has been so dried out and lacking water it has been possible for the mine works to go down quite deep, because with the exception of the mines in the Veta Rica they call Pancorvo's, who was a citizen of Cusco, there are no others that have ended up in water.

So in order to work the mines and remove the ores they have been forced to descend to whatever depths they have by way of ladders, and having chopped out the ore with crow

bars they ascend again with difficulty, cost, and labor, and with notable danger to the Indians. And in order to avoid this they have contrived to make some caves along the sides through which they are mining the mountain, following an easterly course in search of the veins that run North-South, reaching them crosswise.

They drive the access tunnels with much effort, by tip of the crowbar, the mountain being of bedrock, and no more than two pick-men can work at the end or face of the adit at a time, and they change places by night and day. And with the breathing of the Indians and little movement of the air their candles go out, rendering it no small job.

The adits are eight feet wide and a little more than a stature high. One enters them as if walking on a flat, although passing over some poorly worked steps and stairways; they are closed up with their doors; from them the ores are easily removed, without danger to the Indians. When some mine owners wish to work areas that can be reached by the adits they owe to the adit's owner one fifth of the ore they carry out through them, although they are not so rigorous in charging this. These adits are not so common that all the mines connect to them, but rather they tend to reach only the veins belonging to private persons who searched for them.

There is great hope that those [access tunnels] now in progress will be finished soon, as it is commonly believed they will be, and if done carefully it will restore this land and it would be tremendous the quantity of ores and silver there would be. And thus as if I were treating only them [adits] in particular, I will recount to Your Excellency the state they are in.

And although the adit, upon reaching the *chile* ore, which is at the greatest depth of the mine, cannot improve the condition or richness it now has, there are still found in them more than just the savings of descending and ascending [i.e., not having to climb in and out of vertical shafts], important as this is for the security and reduced effort of the Indian. But there are other benefits, there being many mines that have terminated in muds [barriales] and burnt rock [quemazones] and poor ores, such that their value does not match the cost [of extraction], and their owners lack the manpower to break open the mine and remove that earth and useless ore at such great cost. And with the adit they can end this, saving the cost of emptying the mine of all the muds and burnt earth, instead starting the mine anew by going below, even if the muds went fifteen or thirty statures before returning to good, firm ore. The adit, upon reaching the vein and mine, leaves aside the muds and earths, such that these serve as bridge and reinforcement of the host rock.

I place those [adits] here that have reached veins, through which they are reached and worked, along with those that are just being finished. When the adit reaches the vein they call that place the crossing, as the adit and vein make a cross there. And going forward with the adit, as there are several that reach diverse veins, it arrives at each to form a crossing, dividing the works up, some on this hand and others on that, where each one has his mine and holdings. And from the adit they turn off and work their mines, following the vein downward in such a way that ladders are not needed. And they have

ceased working some adits because they just followed the vein down into a hole, such that many ladders were needed to descend, for having worked the vein with more urgency than the adit. And several that they are working today run this risk, although it is not such a great inconvenience as it is only twenty or thirty statures down [from where the adits meet the veins] that one arrives at bedrock, which can be excused since the distance to the surface is said to be more than 160 statures.

And thus there is an agreement of necessity among mine owners to now make a better and wider adit than those made thus far, [tunneling directly to] the part where the mines meet the bedrock, considering the time spent working on the mines and adit anyway, and that they be made with the declination to allow the currents to flow toward the mouth, such that by this means they may drain the mines that hit water. Because those they have made up until now did not have this feature, rather most of them dropping down from their door and opening toward the mine, in decrement of seven or eight statures in [height] and altitude from where they started the works.

There are in this mountain the following adits, with the Indians assigned to them in the time of the inspection plus those given them in the general allotment, both for the cleaning of those [adits] that are finished and for the finishing of those in progress.

The adit of Sojo, through which they work part of the veins of Corpus Christi, and Mendieta, and Rica, and Negra, and Espíritu Santo. The inspectors said it would need eight Indians to get it cleaned, and Your Excellency mandated three be given.

The adit of Marcos Muñoz, now possessed by his heirs, through which is worked the Mendieta vein. Six Indians were assigned to it and they gave it three.

The adit of Luis Hernández Ramírez, through which they work part of the Mendieta vein, plus La Rica. It was assigned six Indians and they allotted three.

The adit of Juan Ortiz Picón; they work through it part of the Mendieta vein. It was assigned six Indians and they gave it three.

The adit of Juan Ortiz de Zárate, which now pertains to his son-in-law, Licenciate Juan Tórres de Vera; they work through it part of the Mendieta vein and part of the Veta Rica, plus other smaller veins, and it runs toward the Tin Vein. It has rented out the fifth parts that pertain to it for each year [i.e., the portion of ore paid by other mine owners for access through the tunnel], and I can assure you that these fifths must amount to some 12,000 hundredweight of ore. It was assigned fifteen Indians for its labor and cleaning and they gave it twelve.

The adit of Medina; they work from it part of the Tin Vein, and also La Rica, and Negra, and other smaller veins. They assigned eight Indians and gave it three.

The adit of Juanes de Gamboa and company, through which they work part of the Mendieta vein and that of Corpus Christi, and it goes following after the vein of the Flemings. They assigned twelve Indians and gave it eight.

The adit of Cristóbal López, who is among the ancient inhabitants of this city and I believe the oldest one in the whole province, being 120 years old and yet so clear of vision that he reads without glasses and at times he climbs up the mountain on foot. They work through this adit the vein of the Blind Men and others, and it heads toward that of the Flemings. They assigned it twelve Indians and gave it eight.

On the eastern part of the mountain, in a low spot, they ran an adit they call Benino's, admirably made, heading toward the Veta Rica and the mines of Pancorvo and Cotamito, whose work they commenced on the day of Our Lady of Candlemas, the second of February of the year 1556; and it took this name because one of the twelve investors who set out to make it is a Florentine called Nicolás de Benino, an ancient personage and among the oldest in town. It has been most difficult to work, as the bedrock through which it passes is extremely hard, and thus it has taken a long time to advance. And it appeared to one Enrique Sandi, native of London, who was one of the investors, that it would be worthwhile to set fires at the rock face at the end of the adit such that by burning the bedrock it would be more soft and easy to work; and so they did after some fourteen years of work, creating a small wall of loose stone two palms back from the face, filling the cavity with charcoal, there being with him four or five Indians who helped; and it so happened that the Englishman went off to sleep and the Indians were stoking the fire, and with the smoke from the charcoal, not having any means of escape, it overtook them to the degree that they lost their senses and could not find the way out, and they and Enrique died there. And with this the work was abandoned for a time until the remaining investors decided to carry on with it, much in doubt that they would see its end, as it seemed to them a lost cause. And so it is that nearly all of them are dead, and if not for their heirs the only ones alive are the Florentine and Toribio de Alcaraz. This adit had to be finished as it is extremely important, since it gives access to all the principal mines of the Veta Rica, these being the deepest in the mountain and as a result entirely unworkable [without horizontal access]. And since continuous labor defeats all, this long and desired work was finished on the day of St. Leon, Pope and Confessor, on April 11 of this year of 1585, twenty-nine years and two months having passed since it was begun.

Soon afterward they opened the Caja del Sol, which is the first one to the east, and once the vein was discovered they dispatched to Chuquisaca [modern Sucre] by the postal route Bernardino de Muñoz, who is one of the investors, and it was only days that they had been working it when he gave the news to the lord president [of the *audiencia*]. And his lordship gave him a grant to use the same sixteen Indians he had in the adit in [the mine] based on the report he had given in the Royal Audiencia, by which they very much anticipated the salvation of the town. The vein was reached at thirty-five statures above its lowest point and the adit terminated in the thirteen-and-a-half yards of mine belonging to Carlos Corso (which I mentioned in the Veta Rica), which were flooded along with the neighboring ones. And now it appears they are dried out and there must have been some channel that was desiccated, such that with the work it no longer seeps. The people who

have mines there are making many thatch huts near the mouth of the adit in order to collect the ores they take out, and also [to carry out] the necessary repairs in the mines so that each may take out that which belongs to him.

The town is extremely pleased by such a great event, and many say that Potosí will at last return to many years of great prosperity and wealth, which was held back until the arrival of Your Excellency; and it is because aside from the ores taken easily from the bedrock and depths by a ladder of thirty-five statures, saving the 135 that there are from this point in the mine where it meets the adit to the surface and tailings pile where the old entrance was, they are pursuing other fruits and gains such as working the ores contained in the old bridges that they left as fortification, a great part of which must be rich, and a great quantity of loose ores and earths that they never took out as they were used to shore up the mines and walkways. They will also work the 'bellies' [barrigas] and much ore that remained in the host rock, such that all the bridges, although there are few as these mines were rich and easy to work, and the rest of the earthworks from the juncture with the adit to the surface (which in parts is 165 statures, as in those [mines] that have 200 statures' depth), will all be taken out as unnecessary things for the fortification and security for that which they have to work and follow, since there will no longer be a walkway.

These bridges of ore are given this name as they link one part of the host rock to another [so as not to leave a large cavity in a vertical shaft], and they serve as connection and pass, fortress and support where one part of the host rock does not unite with another and the Indians have somewhere to rest. The way they arrange to drive these adits is by the persons who have mines in the place where it will be sunk getting together, some sharing by thirds and others by fourths, and sometimes equally [i.e., halves], and according to this order they contribute to the costs and later gain by the fifths [charged for passage] an occasional rent. Since the year [15]80 they have advanced fifty yards, which has cost 4,000 assayed pesos, and half of this was spent on Indians and the rest on a young man who went along with them [as overseer]. The whole adit, from mouth to vein and crossing, runs 250 yards.

Of the tunnels they are working that have not yet reached the veins

The adit of Juan Ortiz de Zárate, now owned by Licenciate Juan de Tórres de Vera, which they call 'Agángaro' since it heads toward a vein owned by the same licenciate that has this name; once it is finished, through it they will work very rich mines. And it must be noted that no single adit is sufficient to work the vein they reach due to the length of the veins and the distance from one adit to another. And thus we see through experience that the Veta Rica is worked through the adit of Sojo, and the first one belonging to Juan Ortiz de Zárate, and that of Medina, and from now onward they will work through the new Benino [adit] that goes in search of the Veta Rica, which will be of great importance to complete due to the richness of the earth, and if they work with diligence it will be finished soon. It is more than 130 yards long. They assigned twenty-five Indians and gave it twelve.

The adit of Pedro de Montoya and company is new and has advanced some eighty or ninety yards. It is going to run into the Tin Vein and will intersect with other smaller veins of some richness before reaching the main one. They assigned twenty Indians and gave it eight.

The two adits of Martín de Elizalde and company, which are going to run into the veins of San Juan de Pedrera, are more than sixty or seventy yards long. They assigned thirty Indians and gave them eight.

The adit of Francisco de Zúñiga runs North-South, contrary to the others, as they go boring into the mountain beneath the Centeno vein, following its host rock. It is more than 200 yards long; it heads toward the mines of Juan de Pendones and the heirs of Marcos Muñoz de Larregata, which they call 'Cerón's,' in the discoverer's mine of the Centeno Vein. This adit has on either side the Tin and Rica Veins. They intend to make crossings in these two veins, breaking through and traversing the distance from the Centeno Vein to La Rica, and also from the Tin, such that they will control from this single adit the three principal veins of the mountain. It is very important to continue this, as the mines it heads toward are very rich, especially those of Centeno, which are the richest in the mountain, those that I mentioned in the discoverer's [mine] and its neighbors. They assigned twenty-five Indians and gave it eight.

The adit of Martín Carrillo, which will run into some veins of *soroche* [galena], is more than fifty yards in length and should it arrive it will be beneficial, although they have considered it to be of scant importance and for this reason gave it no Indians, despite having assigned twenty-five.

On the western part of this mountain they ran an adit in the time of the excellent lord don Andrés Hurtado de Mendoza, so well remembered, Marquis of Cañete and former viceroy of these kingdoms, but whose work was stopped for seeming to have been started too low, as can be seen in the image of the mountain. It was being done on the account of His Majesty, as a gift and in order to benefit this city, and it would be of great interest to His Majesty to continue it, enjoying the fifths of the ore that would come out of it [i.e., access rents] and also of the royal fifths. They spent from the royal treasury 25,000 pesos cash. They reached a distance of ninety-five yards and realized that since the veins all originated on the east side, they would have to cross the entire mountain to reach them. Others are of the opinion that it was a very proper enterprise in that it would catch all the veins and the very base of the ore [bodies], and it is the opinion of the elders that sometimes some veins tend to narrow at their starting point and root, from which they are born like branches of the main trunk.

And thus there are regulations that declare the order that must be followed when two veins come together in the depths, the same which run separately above, and some even presume that these veins all combine into one at the very base of the mountain. Others say, and it would seem to be the majority, that if they had dug [this adit] on the sunny [i.e., north] side, the thing would have been more certain and necessary, and from which they would have followed an incredible richness and general gain. It is very wide and

well worked, with a door and brick arch; you cannot enter it due to the water it contains, which seeps and comes out through its walls.

Of the shafts of the mountain

Shafts are a type of mine one finds on the mountain, both where the vein reaches the surface and farther down in the depths of the mine, for there are many that remain virgin, as is written in its place. And they contain poor ores and the veins are encased, which is to say they go hidden and above them are impediments [padrastros], which are escarpments they cannot work due to the cost they would require if done by open pit, as with the rich mines, for which the remedy is to make a shaft [pozo], which has this name since it is made in the same fashion as a common water well. And they sink them until they hit ore and later they follow their property [i.e., claim], boring the mine beneath the earth, avoiding [rock] that is useless. They also sink these shafts within the deep mines that have been worked as open pits, as have been the principal ones, as they go following the richness that was above the surface of the earth, although it has [often] been badly executed due to the danger of the entrance. They also use these shafts in the depths of the mines to meet up with the clayey muds [barriales] that I mentioned with regard to the adits and poor ores that they could not follow. For these they make the shafts, searching for the ore body that is beneath the 'muddy' or 'burnt' area, and for these they work the mines.

Of the test pits [catas] on the mountain

The test pit [cata, lit. 'sample'] should be clear from its name, and these they make on the surface of the earth in order to discover and locate the vein, and to see its make-up and the direction it follows, plus the quality and firmness of the ore. And the test pit either goes along following [the ore] or they work it in hopes of locating [ore] based on the signs they encounter; and as they go deeper they begin to make a shaft, as we have said.

Of the old way of working mines and refining ore by wind furnace

Now that I have mentioned the veins and adits, shafts and test pits, and the mines found on this mountain, which are all the types of mines and works there are, it is necessary to tell Your Excellency the mode and manner they formerly used to work and benefit from its ores and that which they now use.

At first it was like this: many freelance Indians chose to sign on with mine owners who left them to develop and work so many yards of mine, from which they took the name 'Indians-by-the-yard' [indios varas]. And the mine owner gave them iron bars which they then tempered and sharpened at their own cost and supplied their own candles. And in the time they were inside they worked to 'doctor' [sircar] the ore, which is to say they uncovered it on the underside of the host rock, leaving the rich part stuck on the gangue below, which is where one finds and where there form the earth, rocks, 'seats' [siques, from Quechua 'sikis'?], and 'burnt parts' [quemazones], which are the scoria or dross of the mines that contain some silver. This they took out and placed at the door and mouth

of the mine to clean. And the prize and interest that they took away from this was that the owner of the mine sold them the rich ore they had brought out for view, such was the experience they had in this. The vein and mine from which the ore came produced the weight and price that it was worth, with neither party being offended. And if it happened that the Indians who were inside did not find rich ores for the wind furnace [guaira], which they called 'little houses' [casillas], they were satisfied to be given some ores of small value.

And all the mines enjoyed this kind of profitability in the time when they found rich ores, and the Indians possessed all the wealth of the kingdom, because everything depended on this trade, nor was there any other salvation than the silver the Indians produced in their wind furnaces. And not all mine owners enjoyed such yields, because the Indians only did this in rich mines known to be gainful. And those who did not have such [mines], theirs already declining in value, worked them at their own cost and risk, with Indians allotted to them by the local magistrate, and others rented them, and [the ore] they sold for its entire value like persons who had worked it entirely at their own cost. But in the beginning all the mines contained wind-furnace [i.e., rich] ores, because those they worked were the four principal veins.

At present they do not work in this way, the ores being poor and those rich ones they find being few. Even so, there is no lack of Indians who contract with owners of mines who just let them work them, with the charge that the Indian can simply walk out with ore for having provided his own crowbars and candles. And anything more than that removed by crowbar remains for the mine owner, which he removes using his own Indians and at his own cost, although I understand this type of contracting is more common in rented mines than in those run by their owners.

The general means by which they work these days is by the day wage [jornal], giving each officially allotted Indian three-and-a-half reals, and to those *mingados*, which is to say those who are rented, four reals; and between the two they work the mines, some chiseling out the ore and others removing it and carrying it up via a hanging ladder of three strands, made of twisted cow hides like thick cables, and between each strand rods are placed like a stepladder such that one Indian can go up while another goes down. These ladders are ten statures long, and at the end of each is another that begins from a bench or ledge, or stilt or bridge, each built upon a wooden scaffold upon which they [the Indians] can rest, which are the supports.

The Indians take out the ore, [each load] amounting to some two *arrobas* [c.50-60 lbs.] in blankets belonging to them, and I do not know by what obligation they bring these, tied around the chest and the ore [borne] across their shoulders, and they climb up three by three, and the one in front carries a candle in one hand by which they see where they are climbing and descending, as the mines are dark and without any visibility, and the candle of little light and quite often it is extinguished by the wind, and between their two hands they come grasping and helping, and climbing with great effort 150 statures and so many more in descending; and in mines over 400 statures [deep] – a distance that on a flat surface would tire a man thus encumbered, much less descending and climbing with

much risk – the Indians reach the exit sweating and breathless, and robbed of heat, and the refreshment they generally encounter in order to assuage their fatigue is to be called a dog, and to be given a round [of blows] for bringing too little ore or for taking too long, or being told it was only dirt they had brought out, or that they had stolen something. And not four months ago it so happened that a mine owner, wanting to get into it with an Indian over this, and [the Indian] fearing the stick with which he was to be injured he sought refuge in the mine itself, and in the confusion he fell and was dashed into 100,000 pieces.

The *minga* Indians have some advantages and are better treated, since they are contracted with some freedom and they have the right to take away some 'corpa' [fr. Quechua for 'sod'?] of ore, which is to say a large piece, as their daily wage, and if this were in some way limited they would not return to the mines. And those [mines] that make most frequent use of *minga* Indians are the rich ones, where they encounter profit and can take away ores for mercury [refining] and rich ones [ores to be refined in wind furnaces] should they be close at hand, and if they are there, there is no hiding them. Those [mines] with poor ores cause their owners to suffer, as the Indians allotted to them are so few that they are practically ineffectual and one cannot work the mines with them, especially those who do not have everyone [i.e., all those workers allotted on site].

The natives of this kingdom and all the western nations of this New World of the Indies are by nature of little genius and short of imagination to invent the instruments necessary and convenient for the works they do, and thus they live in profound ignorance of all that is found in the world as if they were not born in it. And as they have no use of bellows to carry out their smeltings; [instead] these Peruvian Indians used some copper tubes three palms long to blow with the mouth with effort. And for the smeltings that required greater force, they made use of the same wind, making in the countryside, in the higher parts, some little furnaces of loose stones, each placed on top of the other without mortar, hollow like little towers, about two palms high. And into these they placed the manure of their animals [llamas] and a bit of firewood, not having charcoal; and with the wind rushing through the openings between the stones they smelted the ore.

And Time, which is the master and inventor of arts, taught them to make from clay, with the industry of one Juan de Marroqui, native of ... [blank], some clay forms in the shape demonstrated here [in the illustration] that they called *guayrachina* [Quechua for 'windpowered'] or *guaira* ['wind'], which are still preserved and in use today, where they easily smelt the ores and without the effort of smelting by bellows [furnace], which is very costly and not so effective for the ores here as is the *guaira* when the strong winds blow, because if it is not [i.e., the wind is not blowing] it is not effective. And as they have such a need of wind in this town they took as advocate and patron of this blessing the glorious St. Augustine, but they have shifted their need from that of wind to that of water, since lacking this they lack everything. When this Marroqui became rich he left for Spain and got married in Seville, and he chose for his coat of arms, which he had painted for the vestibule of his house, the *guaira* with many flames, as inventor of it; and I being a boy I saw it with others, and we could not figure out what blazon [or heraldry] it was.

The means they have of smelting ore by *guaira* is this: first they mill it and wash it, removing the part that contains 'dead earth,' leaving the metallic part – and that which is very rich does not need to be washed – and for every two parts ore they add one of *soroche* (which is a lead ore [galena] they take from mines near this site containing two or three pesos of silver per hundredweight, and alone does not merit refining – neither by the large-scale method of bellows furnace nor by the small one of the *guaira* – as it would be more costly than it was worth), mixing with it certain bone-ash cupels and crucibles, which are leftovers from previous smeltings. (And for the *tacanas*, which are extremely rich ores of fifty marks per hundredweight, they do not place them in the *guaira* but rather in that which is being distilled from it, which is the silver and lead that comes out melted; and as it is being founded one mixes the ore with the galena so that as something softer and easy to melt due to its wetness and softness it blesses the silver and makes it run, as it is more dry, cold, and hard, serving as an alloy and incorporating it with it, as without this it would escape as smoke and exhalation.)

After this mixture is made, with added water, so that the wind does not carry off the powdered ore once it is placed in the clay structure (which is about as high as a common yard, with four angles, or corners, elongated, almost square, hollow, and open at the top; it has made for its four surfaces, or sides, openings or little windows so that through these the wind has more effect; it has a base where it terminates, narrowing down from top to bottom, with an alembic for distilling the ore that is smelted; it is firm, raised above the ground upon a base in the form of a pedestal, a yard-and-a-half or two in height so that it may command more wind, from which it came to be called *guaira* (which in this language [Quechua] means 'wind'), full as it is of charcoal they place inside the ore in the said way, and the air stokes it as quickly and furiously as if it were a bellows, and better, as it fires up with that same speed throughout the entire guaira as a result of its ventilation holes and the fierce wind that commonly blows here. And so the four elements are occupied in refining the silver: the earth gives us the ore, the fire refines it, the water washes it and aids it, the wind blows it and acts as bellows, so much so that it seems they are serving and doing a favor for mankind, rescuing him with the silver that results from this for the necessities of life.

The two ores smelted, as contrary in their qualities as they are different in their prices, they form a leaden paste, which is almost all lead, since the third part of *soroche* they add turns around and runs out with little loss, and from the two-thirds part of ore, little silver results; the same [leaden paste] they take to smelt and refine in their houses, in some small furnaces at low flame. And as long as it takes to expel the lead it makes a certain smoke and movement, and in leaving the silver pure and refined, free of mixture and alloy, this smoke and activity ceases, which they call 'turning the corner,' and the silver is left behind very pure and of 2,230 *maravedis* [of 2,400, or 92.92%] of fineness.

But the Indians did not wait (before the arrival of mercury, when silver was traded as cash, in bits and disks) until it had taken its full course and end, and thus they took [the smelted material] out of the fire with much of the lead and copper they had added since the ores did not respond by themselves. And thus silver circulated so impure in this city and kingdom that that of this province ran about 890 *maravedis* [c.37%] of fineness, and

merchants lost when they collected it by barter for their merchandise, when they melted it to make bars, as commerce was in 'assayed pesos.' And the Indians suffered this injury and problem as well in their smeltings, which the communities did to pay their tributes. And to remedy this the most excellent lord viceroy Francisco de Toledo mandated that they close and not work the copper mines that are found near this city, and he established mints, because the one founded in Lima by the lord president and governor Lope García de Castro was of no aid or remedy, since no one came up to the sierra [with coins] from the coastal plains.

The *guairas* are placed upon the summits and flanks of the mountains and hills within view and walking distance of this city, which makes a pleasant sight in the darkness of the night, with so many fires in the countryside, some placed in line along the points and pinnacles of the mountain in the manner of luminaries, and others haphazardly situated along the creek banks and ravines, and all of them together render a festive and agreeable view. In past years the number of *guairas* reached 6,497. Right now almost all remain, although a great part of them are in ruins, as they do not use the *guaira* as before.

Second Part of the Description of Potosí

In which is treated the introduction of mercury and its use in refining, plus the building of the mills

In the time when there arrived in this kingdom the most excellent lord viceroy don Francisco de Toledo, who is in glory, which was in the year 1569, there was found in the land a great decline in the potential of silver from what it once was, mostly because the rich ores of this mountain had played out. And with this decline the whole land and republic was changed, having been so happy with its riches, which were so much announced in all the world, with all the rich spoils that had been taken out, with which so many men had been made rich. And this general ruin and damage was being felt more each day, with the little silver there was and the low price and poor market there was for all the merchandise, especially clothing and products of the land, and its foods and necessities, the trade in coca leaves and livestock, which is very important, such that all the rates in the kingdom were discounted. All this being given, it should be known that the natives' tribute is in local livestock [llamas, etc.], maize, and locally made cloth for their use, which are the goods of their own harvest that they possess and have. And the silver they pay and give and circulate in the kingdom is only that which comes from this mountain, and the communities and indigenous divisions [repartimientos] of all the districts around this city profit and gain in this mine site, as do all the jurisdictions and parts belonging to the principal cities of the kingdom. And for the outlet had here for the said things they have price and value where they are raised or where they are available; such that in this city they have no outlet due to the lack of it [silver], and [although] there are many who consume and need [these commodities], they have almost no price and little utility. And thus they have been forced to resort to their old mode of commerce, which was truck and barter of one thing for another, a custom these folks had until we arrived.

And with this sad turn of events business here reached the point that no one could say anything more than to lament the present calamity versus past greatness, announcing future destruction, saying that Peru and its riches were finished, extremely sad news for those arriving from Spain. And with this tribulation and necessity, the kingdom full of confusion due to the unlikelihood of a solution, they went around sullen and lacking spirit, especially those men who had been so liberal and generous in such an extremely bountiful land, and where they had lived with ostentation and wealth to an extreme degree, such that their houses were great receptacles, perpetual sites of hospitality for people coming from Castile of all estates, offering them every liberality (there being no inns or taverns); they competed to take them to their houses, where they showered them with gifts and treated them with great affection.

The memory of these things greatly saddened, it being clear that the greatness and majesty of this whole kingdom relied on this mountain, with its mines now extremely deep and nearly stripped clean. The ores for the *guaira* were no longer found; the royal fifths were much diminished; the silver in circulation was now less than half pure; each day there were fewer Indians due to the limited gains to be had. The mines lacking ores for the *guaira*, which were the majority, were no longer worked; and refining with mercury did not even cross their minds, nor was there even memory of it. And since in past years they were so prosperous with only the *guairas*, no one even tried it out, despite an attempt to order them to do so by the lord [viceroy], the marquis of Cañete, and not knowing how to do it, its trial and experimentation was without effect. And there was even a rumor that the ores of Potosí could not be refined with mercury, which kept others from trying it out, this while necessity grew each day.

So His Excellency [viceroy Toledo], finding the affairs of the kingdom in the referred-to state, which was of no small importance considering that although this land had many deposits of silver and gold, all that had been seen were of little consideration next to this mountain, from which there followed the universal profit and which augmented that of Castile and The Main [Tierra Firme], and that the day that silver was found lacking here, as it was declining notably in quantity and purity, all the merchandise would lose the price it previously had and thus the fleets would stop coming, and there would be no customs duties to collect, since without silver in the kingdom it would be impossible to continue communication or trade with Castile, there being two seas in between, with so much coast and navigation, and this land having nothing to harvest that is needed elsewhere; and His Majesty would not be so well served, and the judges and audiencias that were placed in the kingdom, as with the exercise of the most eminent office of viceroy for the discharging of the royal conscience, administration of justice and public good, without silver none of this could be sustained with decency. And thus there arose great insolences and uproars, which threatened the ruin and destruction of these kingdoms, and the preaching of the Gospel could not go forward, there being so few Catholics upon whose shoulders the Holy Evangel rested in such a new and remote land; the Indians would return to their errors and idolatries, in which the Devil held them. And the Devil having such power over them even after fifty years, their very salvation was at stake.

His Excellency had not spent a year in Lima when he decided to carry out the general inspection that His Majesty had ordered him to undertake personally throughout this kingdom, according to his royal instructions, as extremely Christian as it was necessary, and it was one of the greatest general deeds done, combining in itself – as the most efficient and supreme means – all the good things one could have desired or wanted to accomplish for the conservation and growth and order among the Republic of Indians, from which resulted many and good effects, placing the Indians together as humans should live, removing them from the high deserts and wastelands where they lived dispersed and scattered, congregating them in towns so that they could be taught in the things of our Holy Catholic Faith, something that before all this the priests could not easily do, and an infinite number died without baptism or confession, and also freeing them from the vexation they suffered under the hand of their caciques and *encomenderos* and some priests.

As soon as he arrived in Cusco, His Excellency sought to have the ores of this mountain refined with mercury in his presence, using some rich ores and surface prospects that they carried from this city, ordering assays that responded well. And later he showed concern for the relief of this town, ordering that mercury be brought and that they commence refining with it; and the first silver that resulted they took to His Excellency, which he received most contentedly, and each day it became better known, the richness that this mode of refining promised.

And taking charge of this business with the will and zeal that he invested in all the other things offered to him related to the good government of this land, he left Cusco to continue the audit and he did this city the favor of visiting it, for which at his entrance they performed a solemn welcome, and his favor was much esteemed, and great was the joy and contentment that all received by his presence and authority, the same which increased and made greater the constant reputation he had of being very wise and prudent. And as he saw the wealth and prosperity that was waiting for the new refining method, he ordered a great number of Indians to come, making a general apportionment to the persons who wanted to apply, as will be told in its place. He climbed the mountain and went inside the adits through which he saw the work the Indians did, ordering that the mines be visited, measured, and repaired as was necessary; and he had a church built on the mountain where they say mass, as there were more than 160 occupied houses near the veins where the mine overseers live and where they store the ores. He made rules that were very just and expeditious for the success of all business touching on mining, its works and discoveries, and the payment of Indians, and other things worthy of His Excellency, relieving these poor folks, making them be paid for their sweat. And it is to be believed that in his zeal if he were to find them sold as they are today, he would order an exemplary punishment of the oppressors. He provided two inspectors who were to live with their households on the mountain itself, for [the Indians'] aid and defense. And thus this land owes much to that wise and most Christian viceroy, for the special concern he had, not missing a point of service to His Majesty and to the general good, all for the complete satisfaction of justice and great peace there was in his time, and greater wealth than in past times.

It was in quite a hurry that those of this city set about building structures proper and spacious enough for mercury refining, and also to dress timber, which they cut twenty-five or thirty leagues from here and they bring it here on horses and oxen and on the shoulders of Indians, in the manner of the teamsters of Seville, and there is one piece [of lumber so large that it is] carried by sixty Indians. And the price of iron reached sixty assayed pesos per hundredweight, and wood an excessive price, and the same was true of everything else. And today a timber twenty-one feet long and two square, for a water-mill axle, is worth 1,500 assayed pesos. Tradesmen such as blacksmiths, carpenters, and stonemasons were paid what they wanted; everyone's wits were exhausted, all attempting to design structures that were more effective yet less costly for the milling of ores, but as they had no experience nor information on these mills, nor were they entirely satisfied with their refineries' output, they went around worrying that they were spending all their holdings on them with such excessive costs.

And as the number of these machines increased, it became clearer each day that the new refining method was working, and they went on expanding across the land, some building them in the city, of stamps or mallets they called 'by foot,' being moved by them [i.e., human treadmills], which were the first; others, made in a different manner they called 'by hand'; others, by horse, with a stone like a plaster mill; another with an Álava-style turbine [rodezno de alaves]; others, by horses with certain wheels that move hammers; others, by winch [grua], pulled by Indians like a pier-wheel; others by water, with an axle and great wheel like a water-powered gristmill, constructing them in the gulch that runs through this city and in the Tarapaya, Pilcomayo, and Tauaconuño rivers. And of all these different types and inventions there remain only the mills of 'blood' and 'water,' which are those of horses and water, as the things [i.e., sources of power] most appropriate for milling.

The creek that runs through this city, where the mills are built, did not run continuously except in the months of winter, when it ran a little more than three or four months of the year with some velocity. And without hope of any aid some began to construct water mills along its banks; and the first to do so was the treasurer Diego de Robles Cornejo, and it is now in the power of Juan Rodríguez de Ocampo. And necessity being the mother of invention, seeing how little time the water lasted and how uncertain it was, half a league from this city, among some ravines where the water sometimes congregated in the manner of a lagoon, the mill-owners, at their own cost, ordered built certain works in the form of strong bulwarks, of 160, 200, and 300 yards' length, and eight or ten yards wide in the part of the ravine that was narrowest, repressing and retaining its currents. These lakes have a circumference and circuit of 1,700 or 1,800 yards, more or less, and a depth of some three statures in their centers. And there are seven of them, with their floodgates, and when it is necessary to use their water, they raise them, and a body of water issues forth, and on feast days they close them again. When the lakes swell and the year is fertile with rains, the milling lasts six or seven months; and in this year it appears it will last longer, such that many persons have built more mills than used to be necessary, and as they have lacked water in these past years, many are lost and the milling has only been done in Tarapaya and by a few horse-powered mills.

At the time of the inspection tour made of these mills by the lord Dr. don Diego de Zúñiga and the persons he named so that he and they together could see and visit them, he gave his opinion as to the number of Indians needed to manage their millings and refining according to the number of mill stamps they had, and these they moderated considering the Indians absolutely necessary, not allotting them any beyond a number sufficient to mill and refine a bit of ore, and not that which the mill [running at full capacity] might require, which would be many, instead [considering] how many a mill owner without Indian hired hands would need to carry on an average refining. And thus they assigned to a mill of two 'heads' with six stamps on each one, fifty Indians; and to a mill with one 'head' and ten stamps, or eight, thirty-two; and to a horse-driven mill, twenty-two. And for the general allotment, the lord viceroy don Martín Enríquez, not having any more Indians, to do things equally he allotted to those with two heads twentyeight Indians, and those with one, twenty-four; and to the mills of Tarapaya, those with two heads at thirty-six, and those with one, twenty-eight. And this increase for those of Tarapaya was done because it seemed they did not have the facility of those here [in town] to hire Indians for the refining and pouring [of silver] into ingots; and thus those of this gulch were given no more than those needed for dry milling, which is [the method] requiring more effort, with Indians tending the crusher and working at night by turns, or at times trading off between those who rest and sleep during the day with those who have worked and kept watch through the night, and vice versa; and as for the refining of the mill flours, a thing requiring less effort, they would not be lacking Indian hired hands who would be occupied in this, and well, so many mills have been built that there really is no space for more.

The first mill on this gulch next to the Castile aqueduct is that of Juan Núñez Maldonado, of two heads, with a water washer [i.e., an ore washing apparatus with running water]; it has ten stamps.

Next to this one, in the creek below, Alonso Tufiño has a mill of one head with ten stamps, and it shares half of the washer with Juan Núñez, as they are co-investors.

And thus continuing with those found along this gulch:

Nuño de Balboa. Mill of two heads with twelve stamps.

The same. Another mill he had made after the general audit; it is of two heads with [blank]...

Alvaro de Mendoza. Mill of one head with ten stamps.

Diego López de Haro and Bernabé de Salazar. They have a mill of two heads with twelve stamps.

Simón Díaz. Mill of two heads with twelve stamps.

Juan Suárez. Mill of two heads with twelve stamps.

Gómez de León and Sebastián Gutiérrez, who is in the kingdoms of Castile. Mill of two heads and in each one eight stamps.

Luis Capoche [the author]. Water mill of one head with ten stamps, and it is the first one located within the town, as those mentioned up until now are outside the settlement, and those that follow, until noted otherwise, are within the town.

The said Luis Capoche. Another water mill of two heads with ten stamps.

Bernardino Muñoz and Gonzalo López de las Higueras. Water mill of two heads with fourteen stamps.

José Luis de Escobar and Juan Martín. Mill of one head with ten stamps.

Antonio Vázquez and Diego García. Mill of two heads, one belonging to them and the other to Pedro Núñez Téllez; it has fourteen stamps.

Andrés Velasco and Bartolomé de Gracia. Mill of one head with ten stamps.

Alonso de Torrejón and Martín de Resulta. Mill of two heads with twelve stamps.

Juan de Hermosa and Antonio Rodríguez de Ocampo. Mill of one head of ten stamps.

Juanes de Gamboa. Mill of one head with nine stamps.

[list continues on p.119]

The mills of Tauaconuño

To one side of this town, north about a league and a half, is a site with bad weather and more cold than what we have here, and there are three large lakes where they capture much rain water, and in its outflow there are four mills that operate during the same season as those of this town, although the milling and refining they do with more effort due to the extreme cold in May, June, and July.

Mateo López de Gamboa and Mateo Rodríguez have a mill of one head with eight stamps.

Domingo Pérez de Ibarra and the heirs of Suero Méndez de Sotomayor, deceased. Mill of two heads with twelve stamps.

Francisco de Oruño and Luis Sánchez de Herrera. Mill of two heads with fourteen stamps.

Juan de Treceno. Mill of one head with ten stamps.

The mills of Tarapaya

Toward the west is a valley among some ravines they call Tarapaya, somewhat temperate, and compared with this city [of Potosí] hot and of good climate, where there is even a bit of green and one can grow maize and potatoes (and there flows by there a river with little water, although continuous), and on its first bank there is a league and a half of passable road for the animals that carry ore. The first [mills] I place here are the first ones upriver, dividing the mills and river in two parts they call Upper Tarapaya and Lower Tarapaya.

The first mill upriver is that of Juan de Pendones, of one head of eight stamps; it has an ore washer with running water.

And continuing with those upriver, the same [Pendones] has another mill of two heads with twelve stamps.

Carlos Corso and Juan Pérez Donoso. Mill of two heads with fourteen stamps and washer.

The heirs of Francisco de Nava. Mill of two heads with twelve stamps and a washer.

Gonzalo de Soria. Mill of two heads with twelve stamps, and next to it is a church with a priest who says mass to the Spaniards who congregate here, and he also indoctrinates the Indians who live in the barracks of the mills, both to the *yanaconas* and also to a portion of those sent by mandate. Up to this point the willing Indians will carry ore, and it runs three reals per hundredweight; and passing here the price goes up, reaching five reals a hundredweight; to the far ones they do not want to carry it, and they [the mills, as a result] are idle, and their owners lost, having nothing to mill.

Later, farther above, is the mill of Gonzalo Santos. It is of one head with ten stamps and a washer.

Domingo Gallego. Mill of two heads with twelve stamps and a washer.

The licenciate Torres de Vera. Mill of one head with eight stamps and a washer.

Juan Román. Mill of two heads with twelve stamps.

Francisco Nieto de Murillo and company. Mill of one head with nine stamps and one washer.

Garci Michel and the heirs of Jerónimo González de Alanís. Mill of one head of ten stamps and a washer, and it is the last of those upriver.

The first one downriver, returning to the mills of Juan de Pendones, is Diego de Olaeta's, of two heads with twelve stamps and a washer.

Sebastián Sánchez de Merlo and Gonzalo de Toro. Mill of two heads with twelve stamps and a washer.

Cristóbal de Espinosa and Juan Porcel de Padilla. Mill of two heads with twelve stamps and a washer, and this mill is in a good spot and the Indians bring ore at three reals [per hundredweight], and from here on those that follow have the same difficulty and expense as I said of the mill of Gonzalo de Soria.

Jerónimo de Vargas. Mill of one head with ten stamps and a washer.

The heirs of Marcos Muñoz de Larregata. Mill of one head with eight stamps and a washer

The licenciate don Diego Vaca is building a water mill.

Martín de Chazarrete. Mill of one head with ten stamps and a washer.

Gonzalo Pérez. Mill of one head with eight stamps and a washer.

Pedro Alonso Hidalgo and Francisco Ruiz Hidalgo, his brother. Mill of one head with eight stamps.

Next to this mill, Marcos Muñoz de Larregata began to build a mill, and it has been more than eight years since it was begun, and to finish it the lord viceroy don Francisco de Toledo allotted twenty-six Indians, and in the latest allotment the lord viceroy don Martín Enríquez ordered that he be given twenty-eight. It has some walls raised and they have started to make the millrace; and on the lower part of the mill there has been some dispute, saying it could not be made without causing some damage to itself. The heirs [of Muñoz] possess this commons and Indians [i.e., as *encomenderos*].

Diego López de Chinchilla. Mill of one head of eight stamps with a washer. And next to it, on the section above, is a lagoon four or five statures deep on a little basin made there, built in the old days for the Inca; and the water is hot although the area above is quite cold, and it is steaming and the water is of a temperature most pleasant for swimming; and there comes out of there a great gush of water, which turns the wheel of the washer [lavadero] of this mill; it [the pool] is round, and in the same form there descend some large steps, narrowing as they reach the center, from where it [the hot spring] is born. It is always boiling with bubbles and nothing alive grows in it; it is not fit for drinking, although it does not have a bad flavor or odor, and next to it are some spouts of hotter water that contain a large portion of sulfur and bad odor.

Francisco Ruiz, who is in Castile, and the heirs of Juan de Anguciana, former factor of this royal treasury. Mill of two heads with twelve stamps. In this mill there is another

church with its priest. The temperature is hot. And near the mill, on the upper part, is another hot springs where the sick took baths and sweats, and the physicians say this water has a singular quality, and that entering into it they sweat as if in the baths of Spain. There is no building there, and the water comes out gushing, and in this province there are many springs of this type, although not of the greatness of these ones. The philosophers say that this phenomenon is caused by the vapors of the air, which respond and respire through these locations.

The heirs of the said Marcos Muñoz de Larregata, in company with Your Majesty, as a result of a certain suit adjudicated in their favor, have a mill of two heads with twelve stamps, and it is the last one found in Lower Tarapaya.

Of the horse-driven mills and dry mills found in this city and its jurisdiction

Sebastián Gutiérrez, away in Castile. Horse mill with seven stamps.

Nuño de Balboa. Horse mill with eight stamps.

Martín de Tineo. Mill with eight stamps.

Alvaro de Lira. Mill with eight stamps.

Alonso de Torrejón. Mill of eight stamps.

Hernando de Valencia. Mill of eight stamps.

Sebastián Sánchez de Merlo. Mill with eight stamps.

Pedro Márquez. Mill with seven stamps.

Bautista de Sabando. Mill with seven stamps.

Alonso Hernández. Mill with seven stamps.

Don Francisco de Zárate. Mill with eight stamps.

Juan Guerra. Mill with ten stamps.

Pedro de Almanza. Mill with eight stamps.

Don Luis Dávalos. Mill with seven stamps.

Bernardino Gallego. Mill with eight stamps.

Luis Méndez. Mill with eight stamps.

Alonso de Vera del Peso. Mill with six stamps.

Juan de Torres Palomino and Nuño Alvarez. Mill with eight stamps.

Bernabé de Salazar. Mill with eight stamps.

Gonzalo Durán. Mill with seven stamps.

Diego de Luna. Mill with six stamps.

Diego de los Ríos. Mill with seven stamps.

Gaspar Borja. Mill with eight stamps.

Domingo Beltrán. Mill of seven stamps.

Lope de Arestazabala. Mill of eight stamps.

Alonso Gómez Chamorro and Martín de Lacoba. Mill of eight stamps.

The heirs of the *adelantado* Sanabria. Mill of eight stamps.

Juan Danza, Fleming. Mill of seven stamps.

Pedro de Herrera Crespo. Mill of seven stamps.

In the valley of Pilcomayo, which is twelve leagues from this city, Juan de Torres Palomino has a horse-powered mill with six stamps, and in the last allotment they gave him twenty-two Indians.

In the valley of Mataca, which is eleven leagues from this city, Hernán Cabrera de Córdoba has a horse-powered mill with six stamps, and in the allotment they also gave him twenty-two Indians.

In this city Francisco de Segovia has a machine for milling ore with a stone pulled by two horses, in the manner of a plaster mill. In the last allotment they gave him eighteen Indians, and it is among the first inventions used for milling ore in this site.

Rodrigo de Herrera Escobedo built a mill in this city like those used for wheat, with an Álava-style turbine and water-powered striker for milling siftings [granzas], which are leftovers from ores, which, as they are too plentiful (or difficult? prolijas) to be ground up they cannot be profitably processed in the mills. And much of this has remained from past years, from when they milled with 'foot' stamps, which left a lot, and for the lack of power to consume them. He was allotted sixteen Indians.

The dead man Luis de Laserna and his heirs have a water mill, which left in this city a stone for milling siftings like that above, and they gave it four Indians.

On the Chaqui River, which passes four leagues from this city, many years ago the licenciate Gorvalán, lawyer of the royal *audiencia* of Charcas, began building a water mill, which has the axle and wheel in place, and the mill is almost finished. And for it, in the last allotment, they gave it twenty-eight Indians.

When they visit the mills by order of the lords viceroy, they do not only write the [number of] stamps, but also the [number of] amalgamation basins [cajones de buitrones], tubs, reservoirs, sieves, and other equipment, by which number one is left to understand the quality of the mill and how much its owner has invested in it.

The means of refining with mercury

Although it is a very well known thing that with mercury one can extract gold and silver from ores, the means by which it is done is generally unknown, as it is an exquisite thing and practiced in few parts of the world. For that reason I put down here the order of doing this, which, although it is a natural operation and phenomenon, discovering how best to do it required much genius and ability, such as we see how the mercury disperses to extract three ounces, or even two, of the silver found in a hundredweight of ore, all the quantity [of mercury] incorporated and divided, as can well be judged how small a form it is among the hundred pounds of ore, and so in such a quantity [of ore] the silver must be in such a subtle and invisible form that no one could see it any more than if there was nothing there, it [mercury] being a metallic humor that does not recognize the poor metals, and especially there being so little silver; and that which is in the rich ores it fails to recognize as it is in a material different from that in which it was formed. The rich and refractory ore formed in this mountain is the color of amber, and another touches more toward black, the first has more silver and the second, less.

As I was saying, the mercury joins and embeds [the silver] in itself like a sponge does to water, incorporating it into itself [and] separating it from the earth and copper and lead, of which there is always some part, as the silver is formed with these metals, and it is not necessary to smelt by fire, whose property is to separate and refine the metals, consuming that which has the least resistance, for being of a more humid form in order to resist it. And the silver emerges from this process [amalgamation] so refined, pure, and clean that its fineness, without going down from here, approaches 2,280 *maravedis*. They refine it this way:

The ore being milled, they sift it through some wire screens, and they render the ore as fine as if it had been sifted with bristle sieves. And many people sift with those, the Indian women better and most cleverly, than the ones used by men. And due to the lack of Indian men, Indian women and children are assembled, and they are given two reals, and barely sift anything. Those [screens] that are set up and well placed sift twenty-eight, and thirty, and forty hundredweight, between day and night. In past years the value of one of these sheets of mesh was 150 assayed pesos, and they are three-quarters [of a yard]

long by half a yard wide, and for lack of [ordinary] wire they made them of drawn silver; now they sell for eight or ten pesos.

The flour being sifted, the Indians take it to the amalgamating basins, where they 'mortify' it with brine, making it liquid so that it loses its dustiness and dryness, tossing in, for every fifty hundredweight of flour, which is how much common ore they normally put in a basin, five hundredweight of salt. And this they do so that the salt and brine absorb the flour and separate it from the mud or slime it contains, so that the mercury can better receive the silver and have less loss. And in this way, having hung a sheet of crude Holland linen, they add in the mercury, squeezing that which comes out like a watery dew, and the Indians go moving the flour from one part to another so that the mercury 'communicates' equally with all the ore.

The rule they have for adding mercury differs according to the richness of the ore. For that of [three?] pesos [of silver] they put in six or seven pounds per hundredweight, and for that of four, eight; and that of five or six, ten. And in this way, according to the richness of the ore, so does the mercury increase; and for the refractory [ore], to one hundredweight they add another of mercury.

And this mode of refining in basins [buitrones] has been a very necessary thing, because before it took a long time to extract the silver, requiring twenty-five days to stir the ore, and it used a lot of mercury since it spent so much time incorporated; and a certain Spaniard gave this notice for having seen it in Mexico. Some of these basins are made of stone, and others of boards. They are usually about forty feet long, and ten wide on the inside, and in height, from the base and arches, six or seven feet. It is hollow below, with its pavement and floor supported with an arch and walls that contain in themselves some flagstones and boards placed there; and they have their chimneys and conduits through which the smoke flows; and above this first floor they put up its walls; and the floor is divided in six parts of six feet wide each, and ten long, that they call 'great encasements' [cajones]; and these *cajones* are divided by boards that ensure that no ore from one *cajón* joins with that of another.

Adding in enough brine to render the ore a mud, and two Indians placed in each *cajón*, or one if no more can be had, they go mixing the ore with their feet from one part to the other, which they call 'remixing,' so that the mercury goes incorporating and taking up the fineness of the ore.

Once this is finished, which takes from morning until two, then others 'remix' until nightfall; they cover these *cajones* with some covers in the manner of tamped-earth walls, of the same length as each *cajón*, and where they join they fill in with mud so that the smoke from the fires placed below in the arches can escape, as in a bath; and they do this so that with the heat the mercury may better 'communicate' with the ore, since the cold restricts and pinches it off to such a degree that it impedes and obstructs its incorporation.

And in the space of five or six days it removes the fine silver from the ore, and they remove it from the basin to wash in tubs with a certain small hand mill brought by the

Indians. And in the mills of Tarapaya the washers are run by waterwheel, and this carries it [i.e., the concentrate] to the smaller mills, and in a short time much ore is washed, and that done by hand does not go with such speed, although its movement has a certain quickness; and with this the slimy residue [lama] of the ore exits with the running water, being the lighter part, with the mercury and silver settling in the base of the tub as the heavier thing, and the remainder of the ore is left as sand.

And from here they take it [the raw amalgam] and wash it with wooden pans in some water basins, which are of the type the tanners have, into which falls the ore they are washing, and these are called 're-washings' [relaves], there remaining in the wooden pans the silver and mercury [i.e., cleaned amalgam].

And after the principal object [i.e., washed amalgam] that follows from the refining, there remain two worthwhile objectives: one, from the slimy residue [lama], which carries mercury mixed in; and the other, the 're-washings,' in which are incorporated some mercury and silver. The residues are refined by fire, like the mercury ore of Huancavelica, in ovens, and the 're-washings' they turn again and wash in smaller tubs and then in their wooden pans and basins, and they tend to yield so much that they give them three or four rounds. And the residues and 're-washings' are priced according to the richness of the ore they came from and the mercury lost in their refining. They tend to sell, most commonly, a hundredweight of residues and 're-washings,' one like the other, those which come from the hand mill, at half an assayed peso to five or six tomines [i.e., 5/8-3/4 of a peso - check Potosi usage for assayed pesos], and some go for as much as ten [tomines], or even two pesos, those that are richest and that lost much mercury. The rewashings of Tarapaya with their residues they sell at a tomín-and-a-half, or two, or three, since they are from water-powered washers, which due to its velocity speeds along the ore so much that it extracts all its fineness, leaving the 're-washing' quite poor, something that does not happen with that coming out of the hand-mills of the Indians.

Now that the silver and mercury from the ore is clean, they squeeze it through a [piece of] linen and there remain some 'apples' of silver and mercury they call 'pellet' [pella]. And being well squeezed, all that is pure silver is the sixth part, and of mercury the other five, such that if there remains an 'apple' weighing sixty pounds of 'pellet,' ten are of silver, and the other fifty mercury. And from this 'pellet' they make 'pinecones,' which are blobs shaped like sugar loaves, without a point, hollow, and not quite as large, the same which they make from one hundred pounds of 'pellet' and they put them in a certain type of fire, where they have them covered with a clay vessel made like the molds for sugar loaves [i.e., a retort]. And they cover them with coals, and the mercury distills inside in a pipe that receives it, as it is next to the mouth of the hood or clay mold, because the mercury does not have a place to respire and it goes off in smoke. And thus it becomes 'de-mercuried,' the silver glowing like iron in a forge, expelling and distilling out of itself the mercury, the fire working against it. And when it is done well, it remains free of the 'confusion' and mixture of mercury. They keep them in the fire eight or ten hours; however, some people, because they [the resulting 'pinecones' will] weigh more, put them in for a shorter time so as not to drive off all the mercury, as they sell them for their weight in silver, which is a bad business. And the remedy those that trade for and buy

them have when they see them like this, although they do not always notice, is to re-fire them at the seller's cost, or to discount them by so many ounces, based on the impurity they suspect them to have, but others break them up and trade them in pieces, without removing their impurity, and the whole republic suffers the damage. Of the hundred pounds of 'pellet' they use to make the 'pinecone,' there result thirty-two or thirty-three marks [c.16 lbs.] of 'de-mercuried' silver, and of two 'pinecones' they make a 'yard,' which weighs sixty-five or sixty-six marks [c.33 lbs.].

The loss of mercury, for each hundredweight, does not follow a strict rule due to the qualities and diverse types of ore and the variation in all of this, as some ores lose little and others much. And this is based on how rich they are; the richest lose the most, and ordinarily the ore that yields three pesos [per hundredweight] loses a pound [of mercury]; and that [yielding] four, a pound and a half; and that of five and six, two; and the very rich [lose] ten or twelve [pounds of mercury per hundredweight], some of which run more slimy than others. And those of this mountain have been 'incorrigible' in the loss of mercury, because although they have tried some remedies, none have succeeded due to the nature of the ores.

When they transport dry millings along this main gulch, that which is handed off as flour, they normally pay four assayed *tomines* [i.e., half an assayed peso], or four and a half and even five [per hundredweight], and now for two years they have paid six, as there are more millings and fewer mills. When the mill owner is expected to render ore into 'pinecones,' which is to say to refine it from the first milling to the form of mercury-free ingots, they pay for this eight or nine *tomines*, and at seven-and-a-half for the cheaper, when they give bars in advance, and in this year they have shipped at seven *tomines*; and in some mills, so as to have something to do and not be idle, [they refine] at six-and-a-half *tomines*.

In Tarapaya they do this refining more cheaply as there they have lower costs, both for the access they have to firewood to heat the basins as well as buying salt more cheaply and having the mill running perpetually [with the steady water flow] and considering the cost of bringing the ore, which is two assayed *tomines* up to three; and thus they ordinarily render 'pinecones' at five-and-a-half *tomines*. In these years, as there has been much [ore] arriving, it has been at six-and-a-half, and in costs it would be at three-and-a-half *tomines* up to four.

Of the site and mines of Porco

After the discovery of this kingdom, and when the pacification was over between the Spaniards and natives, a Chaqui Indian gave notice to Hernando Pizarro, who at that time was in this province, of some mines the Inca worked in a mountain they called Porco, which is six leagues from this city to the south, in which they found some diggings in a rich vein, in which they claimed two mines. And one was given to doña Francisca Pizarro, his niece, daughter of the Marquis [Francisco Pizarro], his brother. And the ore of these two mines was so rich that by way of smelting it produced half silver, and it seemed to them that the Inca had extracted much silver. And it is a certain thing that the

mines have not revealed from whence this surface richness came. And on this mountain they went on discovering other veins and they settled up to one hundred Spanish households, and today there remain forty.

At first the kingdom won great gain from here, and the Indians smelted the ores by *guaira*. But little by little it has come to an end as the mines have hit water, although the first discoveries do not have it. The ores were found in pockets and were so rich that from some they recovered eight or ten thousand pesos; but as the soil of this mountain is spongy and wet, it has flooded the mines such that they cannot be worked, because in reaching thirty statures the amount of water they contain is great. And although this is a great and costly inconvenience, if they had not run the mines 'after ore' [en quijo], which is to follow the vein straight down, and had they not lost the rich part, they would still be working and the water would flow out.

And the fame of this problem, and of that which passed in this city [of Potosí] of not having water to run the mills all year, drew two men, one who they say had worked in Castile with Juan Helo and the other is a householder of Lima, both of whom went to visit the mines of this site and offered to drain them. And as their owners expected little gain from this endeavor, they thought nothing of the invention, although they tried to get investment, and these [men] have offered to build a machine in this city [i.e., Potosí] to mill using standing water, with a certain invention of some pumps, and as Your Excellency was not yet in the kingdom [of Peru], they presented this in the royal audiencia and described it in writing, and won a provision [saying that if they] built the new invention at their cost, no one else could use it for the space of ten years, with certain penalties. And the city, as it has more need of ores than of inventions to mill them, considered their construction impertinent. And thus it remained, without any kind of effort, [the townsfolk] having so much experience with the many who have come here with inventions, both for milling and refining, saving they can extract more silver from the ore with less loss of mercury, and it is all a tease and a vain entertainment, because any one of these things would have been a great remedy for the conservation of the refineries of this city.

In the last two years they have built next to Porco, in a creek bed that passes by there, two water mills that run all year, and from modern mines [minas modernas] they extract the ore they refine with mercury. It runs three pesos [per hundredweight], and some a bit more or less, there being no gains from the tailings, which have no value despite being from rich mines. And the cause is that, since the ore does not run fixed, there is no communication nor mixing between that in the vein and the rich part, as they find it in pockets separated by voids and distances, the one separated from the other. [Bellows furnace] smelting is no longer done, and the site is in ruins, in the sense that one could make little fortune from it, but the Indians have not stopped smelting with their wind furnaces, although the *guairas* are few. The climate is more harsh, cold, and windy than what we have here [in Potosí]. It has the best water of the kingdom, and the most delicate, and it has a great advantage over [the water] here, as it comes flowing down from a mountain range and its source is in live rock.

Through this site there passes the cloth and merchandise that comes from the port of Arica, which provides necessities. It has Indians assigned it by the lords-viceroy such that from the allotments that serve in this city [of Potosí] are obligated by a separate account to go there to work in the mines, as I will describe elsewhere. And ordinarily they keep most of them occupied in transport, as there live in this town four or five of the richest men in this province, and their main business is to bring down ore from the mountain and carry it to Tarapaya [and] to transport [silver] bars from this city to the port of Arica, and to bring back mercury and merchandise, and they have a great quantity of livestock [i.e, llamas] that they raise in that harsh *puna*, where they live contentedly, not missing any of the 'gifts' of other places. At present, they work in Porco the mines I list here, or at least under this pretext they assigned them Indians. The first column is the yards of mine each has, and the second, their depth in statures:

Vein of Hernando Pizarro, or 'Discoverer'

Your Majesty has a mine of sixty yards, and at present it is rented and held in company by Diego Delgado; its renting was carried out before the royal officials of this treasury of Potosí; and from it they give up a fourth of the ore they remove, and for each hundred hundredweight, two percent.

The building [company] of the principal church of this camp, headed by Rodrigo Alvarez

| 60 | 100 |
|----|----------------------|
| 21 | 4 |
| 60 | 30 |
| 60 | 20 |
| 60 | 25 |
| 60 | 80 |
| | 21 60 60 60 |

Vein of Los Zoras

[Located] on the mountain of the same name. It is new, and much gain is hoped for. The rich ore they find here is sold for 250 assayed pesos per hundredweight, but they extract little of it.

Francisco Alvarez, Diego Beltrán, Baltasar López, and Juan Vejel are putting in an adit; they are not as costly as those of Potosí nor do they take so long to complete, as they run through earth rather than bedrock, such as those here [in Potosí].

| Your Majesty | 60 |
|--|-------------|
| Baltasar López and Francisco Alvarez. The mine is worked by a shaft. | 60 |
| Juan Vejel, Alonso Hernández de Castro, and Pedro Colmenero, and they ar | e working |
| toward this mine with an adit. | 60 |
| Francisco Escudero, Diego Mateos, Hernando Alvarez, and Diego Delgado. | Working the |
| mine by shaft, but also running an adit to it. | 60 |
| Diego Mateos | 60 |
| Antonio García de Aldana and Alonso de Castro, working by adit. | 20 |
| Juan de Campos, Pedro Hernández Ontiveros, and Miguel Carreño | 60 |

| Pedro de Escudero, Cristobal Calderón, and Juan Rodríguez de Ribera | 40 |
|---|-----------|
| Diego Beltrán and Pedro Hernández Colmenero | 60 |
| Baltazar López, Pedro Escudero, and Francisco Escudero | 30 |
| Your Majesty | 60 |
| The minors [children] of Alonso de Zora, deceased Indian, discoverer of this vein | n, and of |
| these yards [of mine] Juan del Campo, Alvaro de Mendoza y Rojas, and Pedro E | scudero |
| have twelve. | 60 |

Second vein of this name, on the same mountain

| Pedro Escudero y Rojas, and they have run a shaft. | 60 |
|---|----------|
| The minors [children] of the same Indian [Zora], and of these yards Diego de A | lbornoz |
| has eighteen. | 60 |
| Your Majesty | 60 |
| Baltasar López, Pedro Escudero, and Francisco Escudero | 31 |
| Diego Beltrán and Pedro Hernández Colmenero | 60 |
| Pedro Escudero, Cristobal Calderón, and Juan Rodríguez de Ribera | 40 |
| Juan del Campo, Ontiveros, and Carreño | 60 |
| Alonso de Castro | 10 |
| Antonio García de Aldana | 10 |
| Diego Mateos | 30 |
| Hernando Alvarez Rubiales, and worked by adit. | 10 |
| Alonso de Castro | 15 |
| Diego Delgado. These two mines are worked by adit. | 15 |
| Diego Mateos, and this is worked by adit. | 10 |
| Francisco Escudero y Almonacir | 20 |
| Pedro Hernández Colmenero | 20 |
| Juan Vejel | 20 |
| Alonso de Castro. For these three mines they are running an adit. | 20 |
| Baltazar López, and in this Francisco Alvarez has twenty yards | 60 |
| Your Majesty. This mine is worked by adit. | 60 |
| Diego Beltrán has fifteen [yards], the other 45 are Baltazar López's. Worked by | / shaft. |
| | 60 |
| Diego Alvarez, and in these yards Pedro Beltran has five, and they are running | an adit. |
| | 60 |
| Diego Mejía de Torres and company. They have started an adit, and there is hop | pe that |
| these mines will yield gains once these works are completed. | 60 |

10 12 13

And this camp [of Porco] was not inspected by the lord don Diego de Zúñiga when he conducted the general audit of this villa [of Potosí], nor did he bring an order to do so, which was a most necessary thing in order to verify the state of these mines and that the Indians assigned are occupied in the working and development of them, as it is not so small the portion that serve and attend well against their will. And later the lord viceroy don Martín Enríquez assigned the audit to don Juan Dávila, corregidor of this province, with power and authorization to allot and give the Indians assigned to this camp. And after this royal *audiencia* [of Charcas] began to govern [in 1554?] they sent order to the

magistrate of mines of Porco to send a report on the state of the mines and of the Indians there, and in what [tasks] they were occupied. And it was discovered that there were 208 Indians missing, because those persons to whom they had been assigned had left; and the remaining mine owners asked that these [208] be allotted among them, and so it was done by the lord president and judges [of the *audiencia*]. Such is the state of affairs in this camp.

Of the camp and mines of Los Lipes

The province of Los Lipes lies fifty leagues from this villa [of Potosí] toward midday, inclined to the east; it extends lengthwise toward the west from the pueblos of the Uruquillas toward those of the Chichas.

It has for borders and limits by latitude the Quillacas and Atacamas Indians, which are peaceful peoples who serve in this villa, although the Atacamas are reserved [i.e., crown tributaries?]. It has in circuit and outline more than 250 leagues. It is cold and dry, and fierce winds always blow. It rains little and is uninhabitable, except for the barbaric nation that has managed to populate it, being people of no unity or order. It has very high ranges with perpetual snow and plains that are a type of salt flats with not one fruit or herb. On the flanks of its ranges are the settlements of its Indians, who maintain themselves with roots and quinoa and a few potatoes, without any other sustenance.

The number of the Indians would be some 3,000; half are Uros, who live barbarically with no more law than to be born and to die; they do not have a settlement nor a fixed place, moving as they do from one part to another; almost all these people are infidels, and those who are baptized have not a single Christian custom, nor sign of faith, nor virtue. The other 1,500 are Aymarás; they have somewhat better knowledge and display evidence of good intentions, and they are settled across thirty leagues of land in very tiny villages. As a result of there being water in that location they have concentrated within such a small distance, because all the surrounding land is dry and salt flats, and its waters briny.

All these Indians are divided in ten *ayllus*, which are like lineages and families, and each *ayllu* has its headman [principal], and these are subject to two paramount chiefs [caciques superiores]; the one they say is an Indian of reason and fond of Christians, and the other, a barbarian and our enemy. They have never been officially counted or reduced [i.e., made to live concentrated in villages], nor have they had a corregidor, and the first one placed among them with this title has barely completed a year, sent by the *audiencia*. These pueblos pertain to the royal crown and pay an assigned tribute, and I believe it is 2,000 assayed pesos, all this without a census nor a sense of what Indians there are nor an assessment of what they can pay. The corregidor, Francisco de Carvajal, who lives with them with his house and wife, has been a success, as he has joined together and reduced in a short time some 1,000 Indians in one village, with which they are contented and peaceful and comply with their tribute. They are a peaceful people and docilely corrected, enemies of the warlike Indians who surround them. Today they live in the blindness they have long had, maintaining their rites and ceremonies.

All the pueblos have no more than one priest, and he resides in the main town, called Colcha, and he has a salary of 700 assayed pesos. And the Indians give him lodging and food, part of what they raise, and from this for his [alms] money they furnish him with some gifts. And it is not possible to form a parish as they are so spread out, and the land is such that in order to travel one must carry fodder, water, and wood, so lacking is it in all this. And thus they die without baptism or confession, a tame people whose souls would be easy to gain; and we see that there is no one who offers simply because of the lay of the land, as there is no other risk or danger. The corregidor went with orders from the royal *audiencia* to reduce them to four pueblos, which they are founding with care, and it will be clear with the arrival of Your Excellency, if it seems convenient to leave them in that location, since to others it would seem well to bring them closer to the Indians of this province.

These people have many llamas and alpacas, as well as vicuñas and guanacos, with which they maintain themselves. There is much hunting of partridges and vizcachas, and fine falcons. There are large rivers that come down from the sierras and on reaching the plain their waters turn salty; and in winter the plains become swamped and nearly covered with water, and some sierras with pueblos are left as islands, surrounded by water as they are located on the flat, although it is not deep. In the summer these waters dry up and reveal the land, which is left as a salt flat; and with the rays of the sun it makes a reverberation in white that is quite harmful to the eyes. No cattle or goats can be raised, nor horses, and those they let loose into the wild go mad from the fierce winds that blow, and the one that is strongest is the West [wind]. There are great frosts and snows that begin to fall in early March and continue until the end of August, which is the summer and dry season, because it does not rain at all, and it is the coldest of the year. And when it rains there is moderation; the rains of winter come around September.

There is in this province a mountain with mines that bears some similarity to the one in this villa [of Potosí], as it is as tall and its shape and form are equal on all sides, although it is a bit slenderer and without as much flank or plain. And if its mines and veins began at the top it would be extremely rich. They call this mountain Oslloque. At the base of its flank are the veins, which do not run up the mountain but rather across, from east to west. The first vein discovered bears the name The Rich. It is next to the salt flat. After following it for fifteen statures they hit water and now it cannot be worked. Near that one they found another vein that follows the same trend, a bit to the west, and they believe it to be all of a piece, and in this one there are ten or twelve Spaniards working, having populated the camp, which is fifteen leagues from Colcha. The ore from this mine yields about six marks [per hundredweight] by smelting, and they have no experience in mercury refining, although three or four years ago a Spaniard brought a portion of ore from Los Lipes that was refined in our manner, and it did not yield well. This was attributed to our ores being humid by nature, whereas those ores are so bland and earthy that the mercury cannot embrace the silver. Next to the flank of the mountain, near the vein [called] The Old, is the settlement of Christians, to the east. There are some twenty houses, and the Indian township nearby, with so many more houses. The Indians go to the mines of their own will and they are paid two-and-a-half reals [a day]. They [also] have rights to some ores.

Aside from these veins they have discovered and located other mines, although not as rich, five leagues from Oslloque on a mountain they call Sacacha. They are on the summit, on the highest part of the mountain. Their ore yields about eight pesos [per hundredweight] by smelting. These [mines] are not worked, as the older ones are richer. There is great hope for great prosperity from these mines, as it is possible to work them without the risk of hitting water. And in the last three years the following veins have been discovered:

Tomás de Ibarra, now dead, who was one person given the staff of justice for that camp by the captain Martín García de Loyola, former corregidor of this province, the same [Ibarra] who discovered a vein of silver ore half a league from Oslloque, on a mountain they call Guantara, on the other side of a river where an old digging covered up by hand was discovered, and they took ore from it and from this, silver, by *guaira*.

The same [Ibarra] registered another vein of ore he found in the same mountain, and of that ore he did an assay with mercury and it yielded well.

Domingo de Basurto registered a vein of silver that he found one league from the camp, and he assayed the ore and extracted silver with mercury.

The said Tomás de Ibarra registered a vein he found in a mountain half a league from the Valley of Escalla, in which he dug test pits and found ores of silver and lead [soroche] with distinct veins.

The same registered a vein of silver he discovered half a league from the main mountain.

Cristobal Flores registered a vein of silver he discovered a league from the camp, and assayed the ore and extracted silver with mercury.

In the area around the mountain there are mines of very fine copper and some of them worked by the Inca, and mines of lead that carry silver and many very fine colors, and a very singular blue for painters. There is a smeltery house with five ovens, four for smelting and one for refining.

If the Spaniards attended to the working and development of the mines, the silver they would recover would help offset costs; and as it is cold country and expensive they cannot withstand the work and lack of supplies that occur there. And also they have the Indians for hire, whereas if they had them by decree [i.e., *mita*] it would help populate the place with the many 'lost people' found in this villa [of Potosí]. The Indians refine the ore by *guaira*, of which there are some 200, and aside from the public mines of the Spaniards it is believed that they have other secret ones where they extract ores, and for this reason they are remiss in going to those of the Spaniards. In past years it was customary that sixty-nine Indians of this province of Los Lipes were to come to Potosí, of

which twenty-three were obligated to the ordinary *mita* allotted by the lord viceroy don Francisco de Toledo to the mines and mills; and later they were exempted from this obligation as there were mines in their territory.

Ordinarily in this villa there attend, per contract, seventy or eighty Indians with their captain, and according to their will they rent themselves and hire out in order to pay their tributes, which are collected by royal officials. They have their dwelling in the parish of Santiago, without being subject to the captaincies, and aside from these there are many other Indians who come to sell a type of cloth they make there, along with quinoa flour, and colors [i.e., powdered minerals] and feathers from the many ostriches [rheas] that they raise in their territory. And it is understood that if they were reduced [to towns] there would follow good ends, after the principal one, which is their salvation. And, since the Catholic majesty of the king don Felipe [Philip II], our lord, is charged with the preaching of the gospel and conversion and good government of these benighted peoples, and as these ones are peaceful and have mines and pay tribute, Your Excellency would be well served to remember them.

Of the camp and mines of Berenguela y Challacollo

Thirty leagues from this villa, on the road to the valley of Cochabamba, from which they bring the flour and food to this town, three leagues from the Sacasaca allotment [repartimiento], there are ancient mines in the site of Berenguela, where there are certain mines of silver in free ore, found in pockets as in Porco. There are ordinarily about ten or twelve Spaniards living there, and for their labor the surrounding Indians give 130 Charcas and Zoras Indians. They refine the ore by smelting.

And fourteen leagues from these mines are others of lead, which they smelt mixed with those of Berenguela. And there are another so many Spaniards and they have 100 Uros Indians of the allotment of Challacollo, and the district magistrate [alcalde mayor] of these camps is Garci Ruiz de Orellana, householder of the villa of Oropesa in the Cochabamba Valley.

Discoveries that have been made in this province of Charcas of mines of gold and silver, for which we have news

It is a very well known thing, most Excellent Lord, that there are many mines of gold and silver that the Indians keep secret, knowing that this metal has been the cause of our perseverance, and thus experience has taught them that where it is lacking the Indians live free of tributes and no one wants to conquer them, and they live under the law they want, and in the idleness and torpor of the vices to which they are inclined. And I believe the devil has taken care that they are not discovered, as one sees the loss there is of souls where gold or silver are lacking. And of the provinces in which we know there are many mines, it is this one of Charcas, of whose land one could almost say is a paste of silver and gold, and yet the demands of this mountain do not permit following up on the discoveries they have made and still make daily, and for the lack of Indians with which to

work them. And of those for which there has been news since the year 1580, I wish to put them here, so as not to leave anything out for Your Excellency.

And the first ones are mines of gold, and the [discovery] made by the padre fray Tomás del Castillo, of the Dominican Order, now in Lima but at the time [serving as priest] of the parish of Talina, which is a pueblo on the road to Tucumán, fifty leagues from here, at the border with the warlike Indians (since to that point one can walk in peace); and in this pueblo the people who are to enter Tucumán join together [in convoys] due to the risk there is of attacks the Indians make on them, which are showers of arrows with which some of the horses are killed among other damages they do. Being there, as it so happened, this padre discovered a vein of gold in a mountain which he named 'Adam's mountain,' which is three leagues from Talina, next to an ancient Inca enclosure (which is a walled space for gathering livestock) and in a crest of sierra born of this same mountain he dug a test pit and removed a certain ore in which he found a little gold in the form of lace trimmings, which he brought to this villa [of Potosí], which struck there like a great alarm. And as new discoverer they assigned a mine to him eighty yards long by forty yards wide, which is what they call blocks, and later seventy yards in reserve after Your Majesty took yours [i.e., a mine was assigned to the king], because outside Potosí this is granted by law. (In this mountain and for a league and a half around it the discoverers do not enjoy [the privilege] of the mine of eighty yards nor of the [mine held in] reserve, but rather of sixty [yards] for the first discovery and the forty of the blocks.) Your Majesty took a mine on this mountain along with many persons, and as the padre saw himself the lord of 140 yards of gold mines that had been judged his, it seemed to him unjust to return to his cell a such a rich man and so of the yards of mine he had he made the following donations:

To the convent of St. Stephen, of Salamanca, thirty-four yards.

To the College of St. Gregory, of Valladolid, another thirty-four yards for the maintenance of four students from this province of Peru; and should they not admit them they were not to receive the said yards [of gold mine as donation].

To the College of St. Thomas, of Seville, seventeen yards so that they could maintain two students of the same order, with the same charge.

To the monastery of St. Thomas, of Ávila, thirteen yards, with the obligation that they clothe the friars of the same monastery.

To the College of St. Thomas, of Alcalá de Henares, another thirteen yards, as a fund for a collegiate membership.

To the monastery of St. Catherine, of Plasencia, another thirteen yards. And finally he ordered that sixteen yards be given to the Tomb of St. Dominic of Bologna for the ornamentation of its chapel. And with this he said he had discovered the greatest riches that men had ever found, and everyone owed him a great deal, as this relief occurred

when there was much need for him; and it has been so forgotten that it is as it was before there was any news of him.

Lope de Brucena discovered and broke news of a gold mine he discovered in Chayanta, thirty leagues from this villa and one league from the said town, next to the river, in a flat-topped range where there is a mochadero [?] or shrine [adoratorio] the Indians had. And on the hill he found two shafts of six or seven statures' depth from which he removed ore with gold, of which he showed when he registered [the claim], because without gold or silver that one has taken from the mine to be registered one can do no more than make a claim, under the condition that within thirty days one is required to assay the ore and make a registry, under penalty of losing the right one has to the discovery. Your Majesty took a mine along with many persons, and the same occurred with the remaining discoveries I place here, and so as to avoid prolixity I will not mention them.

Juan Ramírez discovered four tunnels [socavones] of gold ore worked by the Inca near the San Juan River, in Los Chichas, twenty-four leagues from here next to a spring? [golpon] and some Indian houses they call the farm [estancia] of Macha. And these tunnels had been covered up and hidden at the hands of Indians, and on the flank of this mountain there were made many mesas and earthen terraces with stone, in the form of walkways, leveling the earth in order to make use of it with plantings. And higher up above the huts, toward the south, he found a gold vein upon white bedrock, from which he took gold, and it is said he will spend his estate on these mines, as it is understood that they must be quite rich.

Juan García Cuadrado discovered a gold vein in a mountain two leagues from Chayanta, toward Chuquisaca, from which gold has been taken and demonstration made.

Going on with the silver mines

Bartolomé García and Pedro Calisaya, an Indian, discovered two silver ore veins on a mountain called Chipave, on the road to Cochabamba, sixteen leagues from here.

Pedro Panus, a Fleming, and Pedro Sande discovered five mountains in which they found ten veins of silver ore, twenty-four leagues from this villa [of Potosi], among the Quillacas pueblos. And the mountains have these names because it was an order of the Inca that all the forests and sierras and other places have names and that the land be known by them. The names of the mountains are: Añar, Caguar, Chiarqui, Calabana, Titicaca, Cupayara, and these four [sic] are in the space of a league and next to the town of Challapata, and the other mountain fits into the town of Condocondo, half a league distant from the rest, and they have given it the name Anchayara.

Andrés García discovered a vein of silver in a mountain called Andacagua, also known as Chantiri, six leagues from this villa above the town of Lalava. And at the foot of this mountain there is a lake where there fall the detritus and tailings they take from the mine,

which has been worked since the time of the Inca and had sunk in it more than twenty shafts, and some are quite deep, and they extracted silver from their ores with mercury.

Martín de Mojica discovered a vein of silver ore next to the town of Lalava, on the road to Los Chinchas, in which he has sunk a shaft one stature deep; and the ore he refined with mercury and he extracted silver.

Alonso González registered a vein of silver ore he discovered in the high desert [puna] of Yotala, which is an Indian town three leagues from Chuquisaca and eleven from here, the same which he refined by smelting and extracted silver.

Juan del Castillo discovered a vein of silver in Tunqui Mountain, on the east-west summit, and named it Our Lady of Luna. It is above the inn or trading post of Yocalla, which is on the royal road to Cusco and six leagues from this villa [of Potosí].

Juan Juárez found a vein of silver ore on the mountain they call Guacache, which is on the road to Porco.

Juan Gutiérrez Bernal discovered a vein of silver on the same mountain and gave it the name St. John the Baptist.

Catalina Arupo, an Indian native of Cusco, discovered a vein of silver on the road to Chuquisaca, on a mountain they call Copacoya, which is three leagues from this villa, and she dug a test pit and from it removed ore that yielded by way of mercury refining.

Gaspar Ortiz registered a vein of silver on a hill that is on the road to Los Chichas, a league and a half from here.

Don García Caye, native of Collapata in the district of Cusco, discovered a vein that he located near the town of Lamaota, just past La Pachita, on a height next to the road near this settlement.

Juanes de Basualto registered a mine of silver ore that he found on a mountain along the road to Chuquisaca three leagues from here, and he dug a test pit the ore from which yielded silver by mercury.

The said Catalina Arupo registered as discoverer a vein of silver ore she found on a mountain three leagues from this villa, called Patipati, and by another name Cullapata, which is upon the farm that used to belong to Antonio Díaz, in which vein she dug a test pit and took silver from its ore with mercury.

The same Catalina Arupo registered on the same mountain another vein of silver ore.

The same registered another vein on the same mountain toward midday, in which she dug a test pit and of its ore she extracted silver with mercury.

Juan Nullu, an Indian native of Los Quillacas, discovered a vein of silver on the mountain called Tama, which is five leagues from this villa and falls along the border with the sierra of Guari-guari.

The same registered another vein of ore on the mountain called Condori.

Baldelomar registered a vein of silver on the mountain that is next to the royal road to Chuquisaca, on what they call Chibitara, a league and a half from here.

The said Catalina Arupo discovered a vein of silver on a mountain they call Chaquil, five leagues from this settlement in the Guari-guari range, and from its ore extracted silver with mercury.

The same discovered a vein of silver on the mountain called Parani, which is near that of Chaquil, from whose ore she extracted silver with mercury.

Martín Cara, native of the town of Jauja, discovered a vein of silver on the mountain they call Poconche, which is five leagues from here.

The same registered another vein of silver on the same mountain, which he assayed and got silver from with mercury.

Juan Hurcuni, an Indian of Chapa, discovered a vein of silver on the mountain they call Pococirca, five leagues from this settlement.

Alonso González Sancha registered four veins of ore on the mountain called Tollocsi, on its summit, four leagues from this villa, and two of the veins run toward the east and the others toward the shade of the east side. They are separated from one another by almost a league. In the vicinity of these veins toward the royal road of Chiracoro he found a test digging and ancient tunnel covered up to the extent that one could barely determine what it was; and from the digging he refined ore and extracted silver with mercury.

Juan Niño de Figueroa registered two veins of silver ore he discovered two leagues from this villa on a mountain next to that of Chiracoro, and to that they call Tollocsi; and of its ore he extracted silver by smelting.

Pedro de Grado registered a vein of silver ore he discovered in the range along the Valley of Tarapaya, four leagues from here, and half [a league] from the last mill there is downriver, Marcos Muñoz's (now owned by María Castellanos); of its ore he extracted silver with mercury.

In the mountains born of this main one of Potosí toward the west they have discovered some mines and veins of silver which they took at first to be quite rich, and carrying on their work they have lost the veins since the host rock does not run in a fixed way, straight and perpendicular according to the plumb line, as do the main ones of this mountain [of Potosí], but rather tilted and falling away, which is a bad sign.

In the time of the corregidor Martín García de Loyola a layer of silver ore right on the surface of the land on a small mountain called Vilasirca, which is marked with a cross on the painting and plan of this villa, so rich that it yielded more than thirty marks [of silver] per hundredweight; and it was taken for a very important thing, but later it was lost as the ore had no root.

At present word is out in this town of some mines that have been discovered near Los Lipes and the [settlements of the] Chichas Indians in Los Aullagas, thirty leagues from this villa. The ore is extraordinarily rich and they relate great things about this; and before now there has been news of these mines, although not with such certainty as now. I understand they are to come to Your Excellency to request Indians for their working, as it is famous how important this discovery must be. And I do not affirm it nor do I offer more information as I have not seen it.

Of the discovery that has been made most recently in the Guari-guari mountains

The Indians go about so greedy of their profits and winnings that, knowing the freedom given them by Your Majesty and being masters of their estates and of the discoveries of mines they make, like the Spaniards, since before it was mandated by the lord viceroy don Francisco de Toledo they did not entirely enjoy this favor, and because President Gasca deprived them of it somewhat in order to satisfy the conquistadors of that time and for other not so pure [enteros] reasons he had, as was necessary in order to... the discovery of the mines

y porque el presidente Gasca les habia privado en alguna manera de el, por dar contento a los conquistadores de aquel tiempo y otros motivos que tuvo no tan enteros como era necesario para el efecto que se podia pretender del descubrimiento de las minas; porque claro esta que no consintiendo que se aprovechase de ellas mas que tan solamente el que hacia la manifestacion y registro, sin poder tomar minas ni estacarse los demas indios, pareciendole que si diera facultad para esto no tuvieran los espanoles lugar de tomar minas en los descubrimientos, y que los caciques y principales las tomarian y ocuparian todas, aunque lo pudieran hacer y ordenar de esta manera para que hubiera mas descubridores de nuevas minas, pues no habian de gozar de ellas mas que el descubridor, pero en lo primero fue en lo que se fundo; y por haber cesado esto procuran por este medio hacerse los indios ricos. Y los de este provincia tienen mucha diligencia en buscar nuevas minas y cada dia nos van dando noticia de ellas.

And a year and a half ago a Huanca Indian from Jauja called don Juan Caruachi, a *yanacona* of the friars of St. Dominic of the convent of Chuquisaca, having received sign and news of some mountains five leagues from this villa [of Potosí] (for having discovered a silver vein in them an Indian called Juan Cochaquispi, an Inca native to Cusco, in the Guari-guari range, on Chaquilla mountain, which did not seem to continue [i.e., it seemed to dead end] and was much forgotten as twenty-five years had passed), and on 16 April 1583 he made public and registered a new vein he had discovered on a mountain called Condoruico, which is in the same range. And there were many persons

who claimed mines and discovered many other veins, and they took this business as most important.

And almost the majority of the discoverers went to the royal *audiencia* with a petition and testimony, in which they proved to have registered and discovered 21 veins, and to have claimed in them 225 mines of sixty yards each, and they begged the lords president and judges to favor them by granting Indians with which to work new mines and to find out the quality and richness of their ores. And one Miguel García de Luján, who has the smeltery house in the mint, and Juan Ochoa de Unzueta, who at the time was scribe of the registry [escribano de registro] went to Chuquisaca and carried a certain disk and 'pinecone' [ingot], with proof that they had been taken from the mines of Guari-guari, with which they were much moved to try and grant them Indians, despite understanding that the greater part of the veins were useless, and petered out, and this was why they had registered so many, as it seemed they would be given Indians, which is the target they all shoot at in order to use them in other things, which is exactly what they did with those allotted to them, and not in the work of mining; but they did not give Indians to all, as there were not enough to satisfy so many. And in order to do it with the justification necessary they performed a certain proof, by which they determined who were the first discoverers and those who had made some settlement. And they resolved to grant them 300 Indians selected from among the two-thirds part in reserve [i.e., awaiting their mine labor rotation for the Cerro Rico of Potosí] and living in this villa, these to the discoverer mines of each vein, in conformity with a decree that mandated for the discoverers six Indians from the nearest village to that discovery (although this is not observed), so that with those indicated they would be worked, and from that which resulted they would learn how much of the rest to supply to them. And so they allotted them the 300 Indians, and not three months passed before they saw how insignificant this discovery was. although there was no suit lodged to condemn it beyond it seeming that the work could not continue, nor were they taking out many ingots, and that the Indians they had given them were not occupied in this. (I believe they neglect to do this more for the inconvenience and distance of the mines than for the lack of hope for profit that could follow from pursuing their development.) And the audiencia ordered them to quit this without returning them to their chieftaincies; and according to mandates they went giving them to different persons and to some captains and soldiers who went with General Juan Lozano Machuca, factor of this royal treasury, now dead, whom the audiencia named as caudillo of the people assembled to enter the Chiriguana frontier, after a certain attack and robbery they committed on a farm and estate of [i.e., belonging to someone in] Chuquisaca, the said which [originally allotted Indians] were given them for relief and assistance on their journey. And they went and sold them, a thing commonly done in this town, and they had some excuse, saying that they had no mines when for that effect they had been given, as people who went on their own account to serve Your Majesty in that expedition (from which has come little result, as much from the discord there was between the captains and the general, who was arrested and sent to this province, where he died in recent days – claiming that it was necessary for the royal service and calm of that camp – as for entering into the waters [i.e., rainy season floods] that impeded the war).

Some Spaniards have persevered in the development of these mines. And the rest say they do not for having been stripped of Indians; and two Spaniards, of those who most carry on with these mines, brought a quantity of ore to this town [Potosí] to refine with mercury, and it was discovered that it did not take well.

The silver in this ore is in sockets or hollows [ojos] that one finds by breaking up the chunks, and it is like dust and almost as loose, and it is half silver. Much dust occurs along with it in these pieces similar to two-real coins, that have purity of more than 1,800 *maravedis* [i.e., above 75%]; and the rest of the ore does not contain these sockets and is quite poor. And they say that in striking the fixed [vein] rich ores will be found.

Of the captaincies there are in this town for the governance of the Indians and the number occupied in the working of mines, refineries, and other forms of servitude.

One of the most essential things for Your Excellency to know is the Indians who come to this villa for the working of the mountain and the refineries and other labors, and also the order they have taken in allotting them and giving them out by decree; and also how they [the Indians] return to the villages where they were born, trading places with those who come to replace them, pointing out the number now allotted, both according to the last assignment done by the lord viceroy don Martín Enríquez as well as that of this royal audiencia in the time it has governed, with all the obligations they have relating to Indian service; and the captains named for their governance and administration, whose charge it is to conserve the number [of workers] ordered to reside in this villa for the said tasks, complying with the orders and grants done with them.

And for the greater clarity of the new allotment that Your Excellency will be served to order done, I have verified the Indians and villages subject to each captain; and [also] those not presently in this camp and who do not comply with those persons to whom they are allotted, such as those missing for not coming despite being ordered and mandated to come by the lord viceroy don Francisco de Toledo, from whom came the origin and beginning of this servitude [the *mita*].

As the fame of the wealth of this mountain spread throughout the kingdom there arrived many *yanacona* Indians from all districts of the principal cities to work in its mines, and as there was the gain and profit that followed from the *guaira*, the caciques and *encomenderos* sent Indians from their *encomiendas*, because with those who were here they paid part of their tribute with silver and the village Indians gave livestock and clothing. And as they began to lose the relief they had, since the ores for smelting were running out and the mines were getting deeper and removing ore from them was requiring more effort and yielding less profit, they went back to their villages, and others flowed down through the valleys of Chuquisaca and temperate lands, and thus each day they were fewer. And in order to remedy this it was necessary to obligate and compel the villages and *encomiendas* that were following this tendency, such that they form a *mita* and form a reasonable part of the population of this villa, such that with it the mines could be worked.

And in the time when the lord viceroy don Francisco de Toledo arrived, which was at the end of the year 1572, there were but few people and the camp was nearly abandoned, and its buildings quite ruined and the householders with little silver. And on not finding the number of Indians sufficient to meet the needs they had of them with the new invention of refining with mercury, in order to find the Indians in this custom [of drifting away], and that if they had gone and absented themselves what was the cause, as their plantings were not gone, [he] ordered and mandated that the same encomiendas that had been assigned there should be added a greater number of Indians than had been made to serve in this villa, adding other villages that until that time did not customarily come, and that were of the same climate, due to the danger there is in moving them from one [altitude] to another so that here they would multiply as much as in their native lands. He dispatched documents in which he ordered that, for the work of the mines and new refineries, the encomienda [subjects] of the districts of Cuzco, Areguipa, Chuquito, Our Lady of La Paz, and this province [of Potosí] would be obligated to come, making the distribution of the Indians that had to come from the villages according to the number of tributaries each had, as in this there would be harm if the allotment was not done equally, according to the true number each of the villages had, but rather according to the one left recorded by President Gasca, which was done with no certainty. And in order to do it thus they took from this province, according to the number of Indians in the general audit, sixteen percent of all the tributary Indians they found; and from the Province of La Paz, at sixteen; and from Cusco, at fifteen, and from the province of Canchis and Canas and Condes, and of the districts of Cusco and Areguipa, at thirteen percent. And the total number of people who gathered together in this villa [of Potosí], along with those already there, was 13,340 Indians, and in order to arrive at this number there left from their villages more than 40,000 individuals with their wives and children. And the roads were so covered that it seemed the whole kingdom was moving.

The *encomenderos* and householders very much wanted to reverse this by appealing to the *audiencias*, telling them how could they pay their tributes if the Indians were taken to Potosí, depopulating the land without leaving anyone to tend the plantings and claiming other such things, which is quite common in this kingdom, to contradict the things being put forth for its good governance. And as they knew the custom they had in them, especially in matters of governance, that however light the business might be they should refer it to the lord viceroy, they did not dare to try it, as there were some of them who lacked this care, and things happened to them. And from this total number of these Indians he ordered that there serve and be allotted to the mines and refineries a third of them, and that the other two [thirds] be reserved with the name 'at rest' [de huelga], not because they were taken to be nor were they lazy, but rather so that for their turns and shifts they would go working in the said tasks so as to better withstand the labor without tiring themselves out, as it would be excessive if they did not rotate, serving every four months, (p.138 – printer error causes a few page changes) and the two thirds in jobs of their own choosing, making more than by the day wage [jornal].

The said number of Indians they took from the provinces in the following manner:

This province of Charcas is obligated, in twenty-five allotments, to give 4,405 Indians, which have to reside with their houses and children and wives in the town site of this villa, and they must give to the ordinary *mita* according to the [mandated] third, 1,480 Indians.

The province of Our Lady of La Paz, which is 80 leagues from this villa, is obligated to provide, in twenty-seven allotments, 3,349 Indians, and must give to the ordinary *mita* 1,113 Indians.

The province of Chucuito, which is 115 leagues from this villa, is obligated to provide, in seven allotments, 2,202 Indians. It must give in ordinary *mita* 704 Indians.

Callao, in the district of Cusco, the city of which is 180 leagues from here, has the obligation to provide, in twenty-seven allotments, in this town 1,759 Indians, and for the ordinary *mita* it must give 586 Indians.

Los Canas, [also] in the district of Cusco, is obligated to have in this town, in twelve allotments, 719 Indians, and to give for the ordinary *mita* 206 Indians.

Lost Canchis, of the said city [of Cusco], is obligated to have in this villa, in fifteen allotments, 511 Indians, and has to provide in ordinary *mita* 179 Indians.

The province of Los Condes, in the same city's district, is obligated to have, in thirteen allotments, 495 Indians; they must give in ordinary *mita* 175 Indians.

And because it would not be possible to govern these people well with only the justices assigned by Your Majesty, nor maintain their numbers, and because two thirds go about 'de huelga' and [only] one [third] serves as ordered. Your Excellency named six Indian headmen as solicitors [procuradores], with the title of captain, and they had to be caciques according to the quality of their persons, so that they could assume the governance and administration of all these Indians, identifying them according to their nations and ethnic subdivisions [parcialidades], and [it was] also [ordered] that there attend a headman from each allotment, a native of the same, in order to aid the captains in charge of whatever compliment of Indians allotted to him, and to take care that they rotated, each having finished his mita, [and these captains] being superior to all the rest [of the Indians] in this villa, with power and faculty such that in the name of all the Indians and their allotments it is negotiated entirely through them the [Indians'] wellbeing and conservation, and according to what they do the rest are obligated to be on hand and pass along, as if one had communicated directly with them, assigning them a certain salary and naming constables to help them, and also quipocamayos, who are community accountants who keep a record and account by means of some threads of diverse colors, whose descriptions signify the ayllus and ethnic subdivisions [parcialidades], the villages and the Indians, with their livestock, money, and clothing, and the houses with all the rest of their goods, in which by way of some knots they give them they understand to such a degree that they have no need of writing to keep account of their assessments and business dealings. And although they have 'latinized' Indians

who know how to read and write, as they have in their allotments, they do not ask them [to keep accounts] nor do they trust such matters to ink and paper.

By way of these quipus the Inca had made a discourse on the life cycle of man in the form of a list or column [padron], dividing it up into thirteen stages, from that of babies in the crib to that of decrepitude. And a similar account was made for women, and it was also understood the succession of the kings, and of the notable things that occurred during their reigns. And finally, the accounting with these quipus is so exact, that in a residencia [audit] taken of a corregidor in the province of Chucuito, they asked [i.e., were able to determine by quipu accounts] the Indians that had been entrusted to him in his corregimiento that provided him, without payment, so many chickens, and so many partridges, and the eggs, the hay, and firewood, and the Indians he had been given for the care of his livestock, and those he had sent to the coast, Cusco, Chuquiabo, and this province [of Potosi], and all of this to a great extent. And the language of these threads is not universal, because in one province yellow signifies an account in silver, and in another the same would be understood as black, being differentiated by colors.

The number of these captaincies has gone up to a compliment of eleven, although a few days ago they went back to ten, having dismissed a captain for abuse against the Indians. The number was incrementing as it was deemed necessary in order to govern the Indians in a more orderly and easy way, as it seemed they had too much work with the many people in their charge. The increase of one was mandated by the lord viceroy Martin Enriquez, who had charge of seven, and [the other] four [were in power of] this royal audiencia, which are now back to three, and the said captains who serve are as follows, along with the Indian pueblos subject to them:

Don Pedro Soto, cacique principal of the repartimiento of Macha and captain and superior of the Caracara nation, of the district of Urcusuyu in the province of Charcas. He has as subjects the following towns. The first column is of the Indians that each repartimiento is obligated to have in this villa, and the second, the third of the Indians they have to have for the ordinary mita.

| 107 | 35 |
|-----|------------------------------------|
| 154 | 51 |
| 98 | 32 |
| 57 | 16 |
| 29 | 9 |
| 29 | 9 |
| 354 | 118 |
| 40 | 13 |
| | 154 98 57 29 29 354 |

Don Hernando Ayaviri, cacique principal of Sacaca and captain of the nations of Charca and Zora, and of the district of Umasuyu, of this province of Charcas, an Indian of great reason, and who reads and writes very well and in that he helps in that which comes up with regard to Indians. He has as subjects these repartimientos:

Charcas

| Chayanta | 368 | 122 |
|-------------------------|-----|-----|
| Sacaca | 178 | 59 |
| Santiago del Paso | 116 | 38 |
| San Miguel de Tiquipaya | 85 | 28 |

Zoras

| Paria | 645 | 214 |
|----------|-----|-----|
| Tapacari | 199 | 66 |
| Sipesipe | 139 | 46 |

Don Juan Collqui the younger, native of Los Quillacas, is captain of the Asanaques and Quillacas, of the district of Urcusuyu, of this province of Charcas. He has studied grammar in the college of the Company of Jesus and he goes about dressed in our fashion, with much silk. The Indians do not get along well with him, since in order to sustain his manner of dress he has to rob them, as he is not a cacique, and also because he does not understand the style and usage and customs of his district, nor does he treat the Indians with affability. They gave him this post for being the son of an Indian paramucho (?) and who had done much service for Your Majesty. At present he is with the soldiers of the Chiriguanaes, as he went as captain of the Indians taken by the factor Juan Lozano Machuca. He has as his subjects these villages:

| Puna | 196 | 65 |
|-----------------------|-----|-----|
| Quillacas y Asanaques | 410 | 137 |
| Aullagas y Uruquillas | 198 | 66 |

Don Juan Soto, cacique principal of the repartimiento of Chuquicota and captain of the Carangas nation, of the district of Urcusuyu of this province of Charcas. And these are the four captaincies he has as subjects:

| Urinoca | 42 | 14 |
|-------------------------|-----|-----|
| Colquemarca y Andamarca | 370 | 123 |
| Chuquicota y Sabaya | 369 | 123 |
| Totora | 222 | 74 |

Don Manuel Guachalla, cacique principal of Pucarani, and captain of the Pacaj nation, of the district of Umasuyu of the province of La Paz. He has as subjects:

| Hayohayo | 73 | 24 |
|-----------|-----|----|
| Calamarca | 63 | 21 |
| Viacha | 136 | 45 |
| Laja | 120 | 40 |
| Guarina | 175 | 58 |
| Pucarani | 164 | 54 |

| Hachacachi | 104 | 36 |
|----------------------|-----|----|
| San Pedro y Santiago | 60 | 20 |

Don Gregorio Laura, cacique and second in charge of Caquiaviri and captain of the Pacajes of the district of Urcusuyu, of the province of La Paz. He has as his subjects:

| 130 | 43 |
|-----|--|
| 91 | 30 |
| 196 | 65 |
| 129 | 43 |
| 243 | 81 |
| 174 | 58 |
| 258 | 86 |
| 122 | 41 |
| 204 | 68 |
| | 91 196 129 243 174 258 122 |

Don Pedro Cutipa, cacique principal of Pomata and captain of the Lupaca nation, of the district of Urcusuyu in the province of Chucuito, below which captaincy is located the town of Copacabana, although it does not pertain to this province:

| Chucuito | 408 | 136 |
|------------|-----|-----|
| Acora | 312 | 104 |
| Hilavi | 288 | 96 |
| Juli | 426 | 142 |
| Pomata | 318 | 106 |
| Yunguyo | 210 | 70 |
| Zepita | 240 | 80 |
| Copacabana | 162 | 54 |
| | | |

Don Diego Aco, principal of Juliaca and captain of the Colla nation, of the districts of Urcusuyu and Umasuyu, of the provinces of Cusco and La Paz. He has as subjects the following villages:

Cuzco

| 61 | 20 |
|-----|---|
| 67 | 22 |
| 36 | 12 |
| 88 | 29 |
| 18 | 6 |
| 81 | 27 |
| 99 | 29 |
| 79 | 26 |
| 100 | 33 |
| 9 | 3 |
| | 67 36 88 18 81 99 79 100 |

La Paz

| Puno | 154 | 46 | |
|-------------------|-----|----|--|
| Paucarcolla | 148 | 98 | |
| Capachica | 182 | 61 | |
| Los Uros de Coata | 39 | 13 | |

The following Indians have had until now as their captain don Francisco Chachaqui, who was stripped of his charge for crimes, and now these Indians, who are of the Colla nation, of the district of Umasuyu, in the provinces of Cusco and La Paz, are placed with the said don Diego Aco, making of the two of them one captaincy:

Cusco

| Asillo | 136 | 45 |
|------------------|-----|----|
| Arapa | 196 | 56 |
| Ayaviri Chichero | 76 | 25 |
| Saman | 125 | 42 |
| Taraco | 102 | 34 |
| Azángaro | 164 | 55 |
| Quiquijana | 49 | 16 |
| Chupa | 52 | 17 |
| Achara | 34 | 11 |
| Caminaca | 18 | 6 |
| Carabuco | 12 | 4 |
| Cancara | 18 | 6 |
| | | |

La Paz

| Moho y Conima | 42 | 14 | |
|---------------|----|----|--|
| Carabuco | 84 | 28 | |
| Ancoraimes | 21 | 7 | |
| Huaycho | 73 | 24 | |
| Huancasi | 12 | 4 | |

Don Alonso Chuquichampi, principal of Oruro and captain of the Cana and Cancha nations, of the districts of Urcusuyu and Umasuyu, province of Cusco:

| Yauri | 93 | 31 |
|-------------------|-----|----|
| Checa | 45 | 15 |
| Layasupa | 33 | 11 |
| Llanquisupa | 36 | 12 |
| Umachiri | 36 | 12 |
| Pichiua Hatuncana | 129 | 43 |
| Coporaque | 36 | 12 |
| Ancocagua | 3 | 1 |

| Macari Cupi Llalli Canas de Umasuyu | 24 24 30 | 8 8 10 |
|---|--|---|
| Oruro Lurucachi y Singa Sicuani Marangani Ñúñúa Cacha Charachapi | 126 35 37 16 90 51 | 42 15 19 5 30 17 2 |
| Canchis de Urcusuyu | | |
| Yanaoca Pomacanchi of Diego de los Rios Pomacanchi of the part of Pedro Arias Sangarara Cullapata Acopia Yaucata y Huarachapi Chachaca Canchis de Umasuyu | 81 57 18 40 25 22 7 3 | 29 19 6 13 8 7 2 1 |
| Checacupi Chilaui Cangalla Tinta Cumpapata de Cazalla Cumpapata de don Antonio | 63 15 80 21 15 | 21 5 27 7 5 |

Don Martín Quizana, second in charge of the repartimiento of Achanquiri and captain of the Condes nation, of the province of Cusco. He has as subjects:

| Pomatambo | 60 | 20 |
|-------------------------|----|----|
| Condes de Mansio Sierra | 60 | 20 |
| Cotahuasi | 30 | 10 |
| Achampi | 30 | 10 |
| Achanquilla | 18 | 6 |
| Chumbivilcas | 45 | 15 |
| Chachas y Hucuchas | 18 | 6 |
| Andahua | 18 | 6 |

| Viraco y Machahuay | 21 | 7 |
|--------------------|----|----|
| Pampacolca | 45 | 15 |
| Guaianacota | 60 | 20 |

I have distinguished between these captaincies, calling some Urcusuyu Indians and others Umasuyus. It seems to me necessary to explain to Your Excellency the quality and difference there is between them, which was born from the Incas having divided the kingdom a long time ago into six parts and provinces which they later reduced to four, as two were of the Huancavelicas and Pastos, indomitable people and at times rebels against their overlord-ship.

And the four provinces they divided from Cusco, which as the head of the kingdom remained in the center; one part they called Chinchasuyu, as if to say the part or lot of Chincha, which is a town, and this was for all the nations from Cusco on down; the other they called Collasuyo, which is that which comes to its end in this province [of Charcas], following the same line as the previous for the longitude of the kingdom north-south; the third, according to this order, is that of Condesuyo, which goes toward Arequipa; the fourth they call Andesuyo, which is its opposite, on the side of Cuzco and the latitude of the land, east-west.

For the governance of these provinces they had four supreme governors who attended them at court and were lords with experience and pull in the government. And the lesser matters of their provinces each one heard and dealt with himself, and the arduous and difficult ones they discussed among the four with the Inca present.

And beyond these four divisions by which together composed the whole state of the realm, there were others among them according to nations and origin of their lineages and antiquity.

And the part of Collasuyo, which is that of Collao, which is populated by the nations contained in the captaincies, were divided in two factions, which were called Urcusuyu and Umasuyu, which is to say [the first] people who reside on the mountaintops, which have this name 'urcu,' and the Umasuyus in the lowlands and plains, on the banks of the waters, which in this language is called 'uma'; Others say the Urcusuyus means manly and spirited people, since by this name urcu is understood the masculine, and the Umasuyus the feminine and not so strong. And the Urcusuyus were always more proud and of greater quality, and the Inca gave them the right hand in public appearances and they were preferred over the Umasuyus by reputation.

Beyond this distinction they had another more arrogant and of more regard, in which they became divided, as much the Urcus as the Umas, in hanansayas and urinsayas, and this was general among the subject nations of the [Inca] realm. And the hanansayas, which is to say those of the upper faction, held the first tier of nobility, and comported themselves as military people when called upon by the Incas for war; and the urinsayas, who are understood to be those from below and of the status of common and ordinary folk, and those who served to bring victuals and supplies for the warlike folk. And today they

maintain among themselves these pre-eminences and honors, and they treat with and know one another by these names and surnames.

There was another difference between them, and that was that the Indians of one nation did not use the outfit and clothing of another, but rather they differentiated their clothes according to colors and the way each was fashioned, and their hairstyles with diverse insignias, with which they remained distinguished and known from which nation they came; although this of the hairstyles they are losing to some degree, as much by making use of hats as by following the orders of the lord [viceroy] don Francisco de Toledo to drop the chucos – among the Colla and Lupaca nations – and other nations between Cusco and here who used them. These hairdos are of the fashion in which they paint the Jews and gentiles (?); the same which was prohibited, as these nations have had the custom of molding the foreheads of their newborn infants, making them grow upward with great deformity, which the barbarous folk consider most attractive; and to avoid this, which could cause them to have poor understanding, by taking the brain out of its natural place, inclining the brains as they follow the skull, which comes to make a point, and the whole head and forehead have the shape of a citron, and as the children suffer much pain from these ligatures, many die on them. And for these reasons it seemed the best remedy to take away the chucos, charging the priests and corregidores to take care in this and they are tired of punishing this vice and abuse, and it does not help.

Don Pedro Cusipaucar, native of the Cusco region, is captain and superior of all the yanaconas – of many nations – who reside in this villa. And during the audit that they did of them in the year [15]82, they signed up and registered 980 yanaconas, and it was notable their decline from their former number, and these have all but been used up, and today they are scattered among the parishes, about 400 of them. They have no obligation to serve in the mines or refineries, and the lord viceroy don Francisco that they provide to the ordinary mita 24 Indians, twelve for the royal smeltery, which is where they make bars, and the other twelve for the service of the royal mint. And these Indians I did not count among the captaincies nor provinces, as they are not like those who come in from outside, but rather live here like householders. They are not subject to any captaincy nor do they recognize any superior other than the royal officials, to whom they report with their tribute, and these people are not counted by captaincy.

Don Fernando Corolqui, cacique principal of Talina, in Los Chichas, and captain of those of his nation who reside here, is obligated to provide 20 ordinary mita Indians for work in the adits, and he has complied with this and is not subject to any captain.

In the fourteen parishes of this villa they name each year a justice of the peace, who is an Indian headman, so that he may hear them and do justice, summarily, in their differences, which is his right, and also not to consent to the residence among Indians of blacks, mulattoes, mestizos, nor Spaniards, both for the wrongs they do them and also to impede drinking binges. And treating only on (141) the disorder and excesses there are in this one could compose a long chapter, and as I understand it, until they remedy this great evil, the preaching of the gospel will yield little fruit among them, nor can they be indoctrinated or admitted to the communication of the most holy sacrament of the Eucharist, although for

their incapacity they have not administered it to them. What most separates and deprives them of this benefit [however] are their perpetual drinking binges, so much so that these poor folks spend everything they make on this vice, and commit many sins, with which Our Lord is most offended.

They are accustomed to drinking in public, many people gathering together, men as well as women, the same which hold great dances in which they make use of ancient rites and ceremonies, bringing back to memory in their songs their past gentility. And as these parties last day and night, or better said, all their lives, when they are finished [drinking] the fathers do not recognize their daughters nor the sons, their mothers, and in this there are great evils. And to remedy some part of this, the lord viceroy don Francisco de Toledo ordered that they build certain taverns in the manner of a state outlet [estanco], and that outside these one could not make or sell chicha or azua, and that there they would be given a moderate portion for their money so as not to permit excess, as was reported there to Your Excellency. And here he ordered that they could not bring maize flour to this villa from the valleys, which is what they use to make this beverage, under penalty of forfeiture. And thus they took that which they found, and from this there followed another important benefit, which was that there was more sustenance in the town as they brought the maize in grain and not in flour. And the lords of the Royal Audiencia appear to have understood this in another way, and thus have permitted that flour be introduced freely and it is brought here and sold publicly. And I believe they based this on stopping the thefts done to the Indians who commonly brought it [i.e., maize by Spanish constables, once by denunciation, and other times, and most often, they bribe them so as to dissimulate with them; and also to excuse them from another task, which was for the Indian men and women to mill the maize purchased in grain into flour by hand, as they could not find flour, and because there were many people occupied in this and the republic was not well served for the Indians to spend their time on this. And since one way or another they would be compelled to drink, it was best to excuse them from other harms and the [potential] taking up of wine, which would be of greater inconvenience and harm. Their captains also have authority to punish them for their drinking binges, but they are the first to get drunk, and it would be good to order that they had horses or mules on which they would visit their Indians daily and impede this evil. And they could also help a lot on Mondays by rounding up the Indians on horseback, and to do it with speed, as since they are fat and heavy they cannot walk around.

All the types of Indians that make up the seven provinces subordinate to the eight captaincies are obligated to give for the ordinary mita 4,453 Indians for the work and maintenance of the mines and mills, although this account has some errors, charging more Indians than those who remained as tributaries in some pueblos at the time when the census was conducted during the general audit. And thus those who suffer this inequality have petitioned that they correct this error, adjusting for them the number [also] requested of them to have available in this villa, as there are not as many Indians as their allotment says, verifying it by the tributes they have. And thus they have won settlements in their favor. And this third of the pool is allotted in this manner: 1,369 to the mines of the mountain and its adits, and 2,369 to the water-powered mills of this creek bank and to Tarapaya and Tabaconuño, plus the mill on the Chaqui River; and 620

to the horse-powered mills of this villa and its district, along with other 'dry' machines; and 222 to 34 refining houses, which altogether means they gave 4,258. And it seems that there remain to be allotted 195 Indians in accordance with the 4,453, which is the third part of the 13,340 who are obligated to reside in this villa, and it must be an oversight by whoever made the allotment.

Beyond this obligation the captains have to provide, from the 8,894 Indians of the (p.142) of the two-thirds who remain in reserve, under the name of 'huelga,' in virtue of the ordinance of the lord viceroy don Francisco de Toledo, 200 Indians whom they call 'de meses' [by-the-month], to be allotted and given out for this amount of time the first Monday of each month by the corregidor, with the Protector present in the plaza so that they be better treated, and so that the Indians have the freedom to choose the person with whom they are to rent themselves out, without compelling them to something else, giving a start with this small number to establish that which in time ought to be done with the entire number of Indians, redeeming them from the mandated subjection and servitude [i.e., forced mine mita] and giving means for them not to be lazy idlers.

Item: the said captains are obligated by specific decrees to provide and have on hand 150 Indians whom they call 'of the plaza,' because there they allot them on Monday of every week to persons in need of ordinary labor in their houses, in monasteries, in hospitals, and by the town councilmen.

Item: they are obligated to provide 80 Indians for the pack trains, and to help those who bring provisions to this villa, for which tasks it is difficult to procure [workers].

Item: they are obligated to provide 70 Indians for the salt springs that lie nine leagues from here, in which there reside ten or twelve Spaniards who take out each year more than 60,000 quintals of salt using the yanaconas they have. These mines are worked by adits, making galleries that are supported by pillars they leave behind so that the gallery ceiling does not collapse. The salt is most necessary for the refining of ores by mercury; a quintal here in this villa already costs an assayed peso. And this province is abundant in salt springs, and three leagues from these there are others that are not worked, and of those for which there is news, they lie twice as far away, which is a great inconvenience due to the cost of transport, which is done using the local livestock [llamas].

Item: they are obligated to provide 100 Indians for the maintenance of the reservoirs, although this obligation is not by order of the lord viceroys. The lakes are overseen by two deputies, who are mill owners named each year, along with two salaried assistants paid by the engineers, under whose care the Indians go out and work to open and close the floodgates. And these tasks are only done during the dry season, during which time all things are finished, and when the waters come in they simply return to their caciques and captains. And in case some major rupture occurs during the rainy season and it is necessary to attend to some repair, the Indians can do so without the deputies, as from the parishes many people unite since it is something to repair right away and is an urgent rescue due to the risk and danger to the town presented by the failure of a dam. It has also been the custom to provide the water-powered stamp mills of this villa, during the time

when they are not milling, with one Indian each, and sometimes two, with which they can pull together a sufficient number, as even when stopped there is no lack [of work to be done] in the mills. And at present these 100 Indians are allotted to different people under the title 'mandated' [de cédula].

Item: they are obligated to provide by parish to Dr. Franco, physician and surgeon, by provision of the lord don Francisco de Toledo, who ordered him come to this villa from that city [Chuquisaca?] where he is a householder and resides now, 60 Indians to assist with visits to those sick in the hospital, and also in the parishes; and when the illnesses are serious, to make them carry [the sick] to the hospital, which they loathe as much as death.

Item: they are obligated to provide 300 Indians by mandate of this royal audiencia, which are those allotted to the new discovery of Guari-guari, the same which they tool out of the six captaincies of 'outsider' Indians [forasteros], without providing them any from the four [captaincies] of this province, because in this conjuncture there arrived a decree from this royal audiencia in which it was mandated that the Indians of this province be given to the factor Juan Lozano Machuca, to go with him and his soldiers on the Chiriguana expedition, carrying their food and baggage, 241 Indians, 140 of them from the four captaincies [of this province] and the other 100 of the Yampara Indians who reside in Chuquisaca in the city's public service, assigned for this purpose by the lord don Francisco de Toledo. These Indians took with them and at their own cost 1,200 llamas: 600 given by the Charcas of the four captaincies, and 600 from the Collasuyos, who are foreigners.

And it was a great vexation for all those who did this, although they were given promissory notes to pay for the livestock that they are now going about redeeming. They thought at the time that they made this distribution not to send out more Indians, their number exceeding that of the forasteros, knowing that in all the occasions on which they are offered those of this province suffer and have more work, both for sustaining themselves and having [to maintain] such a quantity of foreigners and newcomers who reside in this villa and who have moved into their valleys and surroundings, occupying their lands, as they are near at hand to assist them with all their necessities, and the foreign Indians excusing themselves as they are outside their villages and have among them no more than the number consigned for the labor of the mines and refineries.

After they removed these 300 Indians from the mines, being of no use, as I said in its place, as they were not in the power of the persons to whom they had been assigned by title, three months having passed, when the audiencia allotted them to different persons until the month of November of the past year of [15]84, when they were ordered to return to their captaincies, with which the Indians loitered a great deal, being free of this obligation; although this pleasure did not last long, as not a month passed before they were again distributed by don Francisco de Zarate y by order of the audiencia, complying with the allotments of Indians that had been given to many persons. And in this manner they allotted the fifths and Indians 'by-the-month,' and 'of-the-plaza,' and [for the] salt mines, pack-trains, and present for this was the Licenciate Ruano Tellez, fiscal of Your

Majesty in this royal audiencia, and in his presence also there were distributed the 100 Indians for the reservoirs.

The fiscal came to this villa with a certain commission regarding a theft they did in the mint some days past, and also to be present for the elections of the alcaldes due to past differences between the opposing parts, the audiencia reserving for itself the confirmation of those elected, as pertaining to the lord viceroys. And the lord don Francisco de Toledo had given his rights to the corregidor Martín García de Loyola and power to intervene in the taking possession [of office] by those elected, when they were those who were befitting. And if the persons were not so, they passed it on to Your Excellency, and in those cases the confirmation was delayed in being dispatched and arriving here, along with other dealings, until the 30th of December, end of the year, leaving those public servants with the staff of office for two years, and to those undeserving ones who lacked even the most basic qualities, as they did not have any reason to perform the residencia [audit], they left only a day to do it.

And with this they were feared and obeyed, because many times they influence these offices, and they even buy them, in order to have through them power in the republic in illegal affairs. And especially in this town, where some two years ago they introduced, as it is done in the city of La Plata, the existence of rural police magistrates [alcaldes de la hermandad], the same which have become common as of last year, a thing worthy of reversing in this villa since it is unbefitting, because they do not serve except to use the staff of office to oppress these miserable [Indians] and also to hold on to the Indians given them upon begging to the captains, and these people have [already] four alcaldes, and are so powerful as a result, among them all. And it would be just to stop this new and impertinent jurisdiction, to prevent the troubles that follow from it [and] for the good government and aid of the Indians.

Item: they have the obligation to give 100 Indians as mandated by this royal audiencia, which has given grants of them to various persons from among some of the allotments who serve in this villa.

Both in Charcas and in Collasuyos they are obligated to provide for the mines and site of Porco 1,000 Indians, of which two-thirds serve and the other is reserved under the name 'de huelga.'

And as a result of this some have claimed that two-thirds of the Indians of Potosí ought to serve by mandate, a plan that would cost the Indians dearly. And they are moved to this by the necessity they suffer in the staffing of the haciendas [i.e., refineries] for lack of Indians, without considering what these have, as will be more clearly seen later on, without offering means or plan that without (144) so much harm and vexation they remedy some part of this necessity.

And the lord don Diego López de Zúñiga, in the summary letter he wrote from this villa to the most excellent lord viceroy don Martin Enriquez regarding the audit of mines and mills he had performed, climbing the mountain and visiting everything personally, and

examining everything carefully with his own eyes, for the good of this town and the service of Your Majesty and of His Excellency, having been entrusted with this task particularly to investigate this royal audiencia, he treated on the lack of Indians that this town site suffers and of the prosperity it would have if it could be rescued, and that it would be good if Your Excellency mandate that the Indians rotate in and out of the mita every six months, as they do so now every four, since from this number they would take the 600 Indians 'by-the-month,' 'of-the-plaza,' of the salt works, pack-trains, and reservoirs. And by this path they came to allot to the mines and mills 1,617 more Indians, this being half of the 13,340, leaving aside the 6,670 remaining of the other half free of all obligation, with which nearly the entire need was met. But, for certain reasons, it did not appear convenient at the time to saddle the Indians with new tasks, nor was Your Excellency fully informed of the things of this town site, as one may conclude from the allotment that was made.

In the time in which this royal audiencia has governed there have followed such good and prosperous outcomes as would be expected, thanks to the knowledge and experience of the most illustrious lord Licenciate Juan López de Cepeda, its head and president, has acquired, according to the genius, education, and virtue that Our Lord was pleased to give him, as well as for the very great experience he has amassed after having served Your Majesty in diverse parts of these kingdoms, whose reputation and generosity must require greater standing than mine in order to put it in the place it deserves.

And thus, moved by Christian zeal and by the desire to help those willing to work for a living, as it is from this that there follows the advance of the royal treasury, guaranteeing that in the period of his government there be no diminution, he allotted the 300 Indians of Guariguari; and 145 of the 195 that arrived un-allotted, as then they did not know the error was greater; and 298 who by his order were taken from diverse persons who had them according to the general allotment, [but] so as not to work with them in the mines as was intended, nor to have them work in the refining houses, and others who were selling them; the 100 from the reservoirs, with another 100 that had been given to him as part of his royal perquisites, plus fifty pertaining to don Jerónimo de Silva; and also by this order they have allotted the 500 Indians 'by-the-month,' 'of-the-plaza,' of the salt works, and of the pack-trains, which in all makes 1,443 Indians.

And thus there now serve about half, since the 1,157 who fall short of 6,670 (which is half), are for the most part not in Potosi since there are lacking the 60 Indians of the village of San Pedro y Santiago del Arrabal, of the city of La Paz, 39 of the Uros of Coata, and 50 of the Asillos, and 18 of Cangarara, and the greater part of the Conde Indians of the Cusco district, who are in all 390; and all those missing equal 557.

And beyond these there are many others missing who have gone and abandoned their villages, and no one has swapped to come and serve in their place. And those who least like to be in this town and most desire to return to their own are the Uros, being a people of no use, without the least intelligence, of bad beliefs, and the most vile and low people of all these nations, the same which, before the general audit and resettlement, lived on the lakeshores, sustaining themselves with raw fish, as they are great fisher-folk, and on

roots of rushes, without any other care or means of surviving.

Beyond the Indians who today serve in this villa, the lord viceroy don Francisco de Toledo ordered that there come 750 Indians from the district of Arequipa, Llanqui, and Cullangas, who have not customarily come to this villa. And with regard to this (145) they have filed many complaints, sending people with staffs of justice that they take away, and they cannot do it on order of the corregidor, who always impedes the sending of the Indians to this villa according to his whim [con colores que toma, lit. 'as the dye sets'].

In the latest allotment the lord viceroy don Martín Enríquez did not include these people, instead ordering them to go for the rebuilding of the city of Arequipa, which after a tremor and earthquake that occurred on 21 January, [15]82, desolated it, and almost all the buildings fell down, along with the monastery of Santo Domingo, the convent as well as the church, with nothing left standing, and the rest were quite ruined and leveled to the ground. And it was a case of one of those predicted things that have been seen; and the whole town was in tents and shelters, fearing that a volcano that is within view of the city would erupt, as it was thought to have caused the tremor, which it ordinarily suffers, and that if it should come down in the night many people would perish; there died some 40 persons.

And as all the types of Indians included in the ten captaincies pay [tribute] in the general collection, charged of them in their villages, the salary that was due to the corregidor, lawyers, and public defenders, and it not being just that those who come to reside [and work] in this villa be charged with new and rising costs, for judges and ministers of Your Majesty, the mine magistrate, and [mine] defender, and inspectors, who are placed for their defense and protection, as well as the salary that had to be given to the [Indian] captains who governed them, without giving to understand either the lord viceroy don Francisco [de Toledo] that they had to pay these costs – the people in whose plants and refineries the Indians were occupied – because the day wage that had been determined according to the job in which they were to be occupied was the just price that was due to them for their labor, reserving in itself the distribution of the growth there was in the day wages, leaving it up to the republic, in the manner of excise, with budget and accounting of that surplus that they paid to the Indians, obliging them to pay certain duties, as will later be declared, on the day wages they were assigned, in this way:

To the Indians who were to work in the labor of the mines of the mountain, at 3 reales and a half.

To those who were to work in the mills and refining houses, and public works, and other tasks within the town, at 2 reales and three quarters.

To those occupied with transporting ore with llamas from the mines to the mills, at 3 reales.

And to the third of the Indians, which are those 4,453 that they allotted to the mines and mills, it was mandated that each week it be charged of them by their factions and ayllus and captaincies, and from each one for himself half a real per week, which is the tax they call 'the grains' [los granos], which they place in a chest with three keys that ordinarily was kept in the house of the corregidor, the same which kept one [key], another [was kept by] the mine magistrate, and the third [was kept by] one of the inspectors of the mountain. They exempt the charging of these 'grains' for three weeks each year: that of Christmas [pascua de Navidad], Holy Week, and [the week] of flowers. Over the course of the year these 'grains' add up to 8,500 assayed pesos, the same which are distributed in salaries as follows:

To Diego Bravo, head mine magistrate, 1,500 assayed pesos, and this they used to pay from the royal treasury, being an ancient office.

To don Francisco de Zárate, as judge of the natives, 1,000 pesos, plus 600 as auditor of the mountain.

To don Francisco de Vera, general [native] protector, 1,700 assayed pesos, although his predecessors were never given more than 1,200.

To Hernando de Oruño and Bernabé de Bruceña, inspectors of the mountain, 1,000 assayed pesos each.

To the said Diego Bravo, as treasurer and person who keeps account of the charging of the 'grains,' 800 assayed pesos.

And to the six old, originally assigned captaincies, 200 assayed pesos per captain, with which the four that have been added means they divide up 1,200 pesos, about which they complain. And some have appealed to the audiencia and they have been given title to the 200, but [the officials in charge of the purse] do not comply. It is considerable the work they have, and the cost, to carry themselves like headmen (146), and they never lack expenditures. And they are pretentious those who hold this office, as they are ambitious by nature.

The Indians of the said captaincies also have the obligation to give half an assayed peso each per year to the hospital of this villa, which comes out of the rise in the day wage paid to those among them who serve, as they have the obligation to cure them of their ills. And the hospital could not, without this aid, which amounts to more than 6,600 pesos, cure and provide for in their illnesses the many people who go to the hospital, with the number of Indians who have come. After Dr. Franco left, the hospital itself has taken charge of the sixty Indians provided by the parishes, and the [government] ministers say that they have sold them, and by this means the Indians are worth to the hospital more than 4,000 assayed pesos, with which they pay a physician and surgeon and save much money. The hospital's costs in salaries to its ministers amounts to 6,000 assayed pesos. In rents it has 14,000, with the 6,600 pesos given it by the Indians, and minus the 4,000 from the sixty [allotted and 'sold'] Indians. There is a chest with three keys into which

they put that which they go charging of the Indians; Diego Bravo has one [key]. And from this money they pay 400 assayed pesos to the [hospital] administrator, don Francisco de Rojas, archdeacon of Tucuman, who says mass for them, and they give him room and board, and he is virtuous, and lives 'with reformation' as a good Christian.

The ecclesiastical tax and stipend that they give to the priests of this town, because they indoctrinate these natives, are paid by the encomenderos of the realm, for having taken the surplus from the main income from tributes that which adds up to the 'doctrina' paid by the tributary Indians. And from this number they took out the Indians that come here, taking that which they were supposed to give in their villages to their priest for those here.

Due to the great flow of Indians there is in this villa, it appeared to the lord viceroy don Martín Enríquez that for their governance the ordinary justices did not suffice, neither for doing them justice in their business affairs, due to the many offenses and abuses they commonly receive, and to free them from subjection to the various judges it was necessary to elect a special judge, one who only looked after their protection and defense. And it was also understood that he wanted to pass along and give him [charge of] the governance and oversight of the Indians who where in his charge, to [make them] comply with the decrees that were issued to them, and the carrying out of the allotment and other duties. And with his death and end this naming ceased.

And this royal audiencia assigned for the use of this new office to don Francisco de Zárate, a person of much regard and quality, with title of Judge of the Natives. And in the time that he has exercised [this office] it has been seen of how much importance this tribunal has been for the expediting of the concerns of these people, both for the good payment and treatment that is made for them, as well as the total satisfaction of justice that is obtained in their quarrels and demands, and being outside the obligations they had when their different cases were brought before different judges and notaries, such that many times it suited them better to lose their justice than to pay for it with so many vexations. And as their cases passed through distinct offices, their suits and demands were lost, and the guilty parties were rarely punished, nor could it even be known who had treated them ill. And thus they went back to their crimes, up until the time when this office was held by Diego de Meneses, as scribe of this court, and now he is [scribe] of mines, and before him pass the head magistrate's cases, who also knows the affairs of Indians under the title 'judge of natives,' and of don Francisco de Zárate; and to some it has seemed that this tribunal was too much. The audiencia did not give it much instruction in many things important to the common good and good governance of the natives, which they lack in many things, which ought to be the principal aim of Your Excellency, building upon this personage a great assumption that is made by his own hands, as that which gives quality and value in this villa to these posts is having a hand in the governance of the Indians, and this pertains to the person to whom Your Excellency would be pleased to make this grant. In Cusco there is an unsalaried judge of natives and he is in charge yearly, elected by votes, and he leaves office on New Year's Day (p.147), and it has always been [held by] ranking householders, but here this would not work

since I hold this office as important if I had access to the perquisites that might pertain to it

On the mercury monopoly

In the governance of this realm, Your Majesty has three businesses, arduous and of great quality, all which together help to augment the good means that Your Excellency would provide for [the realm's] conservation, which are; the ores of this mountain, the Indians who attend to its labor and refining, and the mercury of Huancavelica. And to all of these is hitched the stability of this kingdom and good government of Your Excellency, as the gains of the royal treasury hang upon these three things. And how much greater the name of this government should the means taken for this effect be still more improved, by which Your Majesty would be most served and the land would have prosperity, which is what is most to be desired, because for the matter of justice, audiencias have been put in place to discharge the royal conscience and also that of Your Excellency.

As I have treated on the ores and Indians, I did not want to carry on without putting the matter of mercury in this place, and on how much is consumed and how much is needed in this villa, and the origin of its monopoly, along with its importance to the royal fifths and the general good that there be a supply and abundance of it, referring to the past rentals [of the monopoly], this being the primary business that Your Excellency has to offer, gravely important, with the necessity that it be given by monopoly contract.

After it was understood that the ores of this mountain and its tailings could be refined with mercury, the lord don Francisco de Toledo ordered the shipment they used to do from the mines of Huancavelica to New Spain. And at this juncture he placed in effect and executed that which His Majesty ordered him to do by royal decree regarding mercury mines, such that those found in this realm be placed under charge of the royal crown, ending the contracting system formerly used, reserving to His Majesty as king and lord that he is of everything, because the mercury mines in Castile are of and pertain to the royal crown and are not for the enjoyment of the private persons who discover them, as is true of gold and silver mines, and [it was ordered] that those found here be worked and developed by royal officials and by royal account.

And considering the inconveniences that would follow from persevering in this, as someone who had the thing at hand, he wrote to Your Majesty of what great importance to your royal service and the good of these kingdoms this was not to carry out decree in every particular, because lacking the gains and interests that follow to the discoverers, they would not bother to search for mines, a thing from which would follow as much harm to your royal treasury as it would to private parties. Because the most urgent remedy that has been found for the restoration of Peru was that they could refine the ores of this mountain, even if they be of poor quality, by having mercury at a good price, the same which could be done if mines were discovered near this site, since, lacking this, encountering a remedy would be most difficult, if not impossible, as, well, they have not encountered mines that, lacking mercury, [yield ores appropriate] for smelting, enough to sustain the commerce and general interest.

And thus it is understood that the discord of this land has its origins in Huancavelica, for lack of ores of mercury, and that on this mountain [of Potosí] and those of its province that contain silver mines, they ought to last a long producing poor ores, and that future necessity, how much more than we have right now, makes it necessary to provide a new means by which they may be refined, because the cost of refining, with the richness of the ores diminishing and with the mines getting deeper every day, it is not possible to carry oneself forward.

As a result of which Your Excellency established a type of contract and means with the persons who at the time held the mercury mines and with the discoverers who came forward to claim them anew, adjudicating them the ores that from them [these mines] they might extract in the space and time of thirty years, after which time these same mines would pass on to His Majesty, and be incorporated into his royal patrimony, under the charge and condition that the mercury that (p.148) they produced they could not sell or exchange, rather that they be obligated to give and sell it, and hand it in, to his officials, pricing each quintal thus brought into the royal warehouse at 42 assayed pesos; paying, for each five quintals brought in, four at this price, with one remaining for the royal fifths. And for [any mercury produced by] mines discovered anywhere between Cusco and here, His Majesty would be obliged to pay 52 assayed pesos [per quintal]. Such that with the said monopoly they were left with sufficient gain (as was done by way of renting with those of Huancavelica) so that, working the mines at their own cost they would make good gain, as they have had.

This monopoly taken as a given, mercury was brought here to this villa for a time on His Majesty's account, and some private persons with license from Your Excellency, with certain additions, until the year of [15]76, when a rental was granted for the mercury in that city [of Lima] to Gonzalo Hernandez de Herrera and Luis Rodríguez de Laserna, and also Gaspar de Solís and his associates, as Your Excellency discovered some inconveniences in bringing it on His Majesty's account and learning that it was better in private hands, both for the risk at sea and cost if pack-trains, and avoiding the cost of the officials who had to be occupied in the administration of this business, and also because the Indians who went about working in the mines of Huancavelica had to be well paid, along with those who possessed them [the mines], and to have people whose job was to carefully bring and keep on hand more mercury than needed in this warehouse, as well as someone who knew the substance [mercury] well.

The rental contract was given to the said companions by public auction, the same which were obliged to give to His Majesty 64 pesos and one grain of assayed silver for each quintal of mercury they placed in the royal warehouse at Huancavelica, of which price there pertained to the refiner of the mercury 42 assayed pesos, which was how it was appraised, and they were to be paid later, once it was delivered and inventoried in the royal warehouse before the royal officials; and to His Majesty 22 pesos and one grain, which they were obligated to pay in this villa [of Potosí], within twenty days of the arrival of the mercury, which was the term, as they were obligated to advance it to private persons under the condition that they could not sell it for more than 85 assayed pesos [per

quintal], obliging them to receive all the mercury that was handed over to them in the warehouse. And in the three years because of placing this contract, without putting a limitation nor clarifying what could happen to them with the increase in mercury that there might be in these three years than in the previous ones, His Excellency made a new allotment of Indians to the renters of the mines, adding to them a number so that with this rescue they would extract much mercury, with which left the company in great need, lacking the money to pay for the mercury that had been delivered to them.

And for this reason the householders of Huancavelica wrote to the lord viceroy, since His Excellency had set up the monopoly, taking away from them the trade and freedom they had had with mercury, [and he] was pleased to decide that the renters had to pay from their capital without retention, and the result of this was that they could not pay the Indians for their labor, and so they were jailed, the renters living in Lima. And he ordered the lord Licenciate Francisco de Cárdenas, criminal prosecutor of that royal audiencia [of Lima], to go to Huancavelica to pay the Indians and the mine owners, his salary and travel costs to be charged to the renters [of the monopoly], and they sold their things off cheaply in order to provide for this without letting them go until there arrived testimonies saying the Indians had been paid, all which left them [the renters] very sorry for having gotten themselves into a business that brought them to such ruin just as they were completing the third year of the contract.

Seeing how those who had held it were left soured, and the town disillusioned with its management, he [the viceroy?] wrote a letter to the corregidor Martín García de Loyola, in which he said the contract was going to die and that no other person wanted to take it on, and that it would greatly benefit the royal service that the mercury supply be handled by a private person, and not placed upon his royal head, although by this path it would not be of so much gain, and it may end up tempting some persons in this villa who could do it, because, with nothing but the news that this was happening [i.e., the monopoly was ending], it would be an occasion for awakening the greedy who would carry it out when here [in Lima] no one will (p.149), the importance of this business being a great burden to bear, especially with the new risk of corsairs in the South Sea, and other inconveniences that would follow for the proper payment of the Indians and mine owners, as, well, from here they would have to carry the silver in pack trains in reales or have them coined in the Lima mint.

This letter having arrived in Potosí, and the corregidor understanding that which the viceroy desired and having his own discretion and knack for business, he began to negotiate with one Francisco de Guzman, who is now dead, and with Carlos Corzo and Juan de Pendones. And he was also able to do it with a means and plan that was given: that the lord viceroy would grant them from the community chest an 80,000-peso bond [censo], charged to the householders of this villa, which today is still unredeemed, plus a number of Indians and a quantity of mercury for their refineries, and other things that time has shown to be of little importance to their company. And thus it was carried out, with an increase of eight assayed pesos more for each hundredweight, such that they came to give for each quintal 72 pesos, His Majesty gaining 30 for each. And the overbidding and excess for this contract has come to amount to 224,000 assayed pesos,

because the factors have received in three years 28,000 quintals, and five years have been needed to consume this amount in this villa, which have passed since the contract was made, and it is still not all gone.

And this company has seen itself in greater labors than the previous one, because that which they might have gained they gave to His Majesty, without winning the least profit, and having gone through many sell-offs, and they [the investors] and their backers have been sued and jailed, and [the guarantors] have rescued them and paid on their behalf a quarter of what they backed them for. And in this time there has been a great abundance of mercury, and it has been sold so cheaply that on credit it has been sold for 70 pesos and somewhat less, when it had been backed at 70. And in the last two years it has insufficient, and one has not even been able to purchase it with [silver] bars in hand, and this [fluctuation] would have been impossible had Your Excellency been in this land, due to the great care the lord viceroys have had in making sure this commodity is not lacking in this villa, in which the contractors are obliged to offer it on thirty-day terms, since ten was added to the twenty by the lord viceroy don Martin Enriquez, so that the engineers and refiners would be better able to pay for it, having signed liens.

And for this term they suspend the charging of the thirty pesos per quintal that pertains to the royal treasury. They charge the mercury given out on credit as if it were a grant belonging to His Majesty, preferring this type of debt over that to private persons. Due to the risk there may be in this, I believe Your Excellency would have some difficulty contracting this business out, as these renters have it much elevated, and it would not be convenient that by the hand of Your Excellency it be less, other than benefiting by account of His Majesty.

It is a thing of utmost importance to the wellbeing of this villa that Your Excellency give an order for the new contract that will be celebrated, so that there will always be more than enough mercury in this warehouse, as has been mandated in the previous ones. And that, giving guaranteed notes, they be obligated to offer it on credit, because many times, when there is need for it, the parties are not satisfied, even with guarantees, not even the backers, in giving it to private persons.

When there is an abundance they refine many ores and everyone is motivated to supply themselves with ores, and to expand their refineries, with the hope of this relief. Because in no other way can they occupy the silver [or money] in the ore, and in the milling, and in the transport, for which, lacking this commodity [mercury], much money is needed for this, and it should be given easily and on credit for seven or eight months. And on account it would be found cheap, as it is the case that it does not benefit the contractor to sell below the set price, there being a surplus of it, the exchanges and sharp deals [mohatras] that they make in clothing and coca and wine they take from mercury.

There are consumed ordinarily in the refining of the ores six or seven thousand quintals of mercury [per year], leaving aside that which is recovered from the slimes from the more than 50 ovens located in this villa an in Tarapaya, where they burn and refine that which is left over from the ores, which would amount to more than 300,000 quintals,

from which would be taken, averaging the ones with the others (p.150) according to the loss there is of mercury by quality of ores, 2,000 quintals of mercury, more rather than less, the lamas being of the quantity mentioned. And to have here a hand in this commodity, there would follow great gains, and men would be made very rich, and to these factors Your Excellency could grant a favor, for the service they have done to His Majesty, relieving them in some manner from what they owe for the work they have had in this growth.

Of the exchange and contracting the natives have in the ores and the differences that have arisen over this matter, along with the resolutions there have been for it.

Since the discovery and foundation of this site and villa of Potosí it has been a most guarded custom, Most Excellent Lord, among the natives, to freely trade and barter the ores they take from the mountain, selling them in the public square (which is set aside solely for this business), in which there assemble a great concourse of Indian men and women to sell that which they have acquired and extracted, and others to buy it, both the rich ones for the guaira as well as those ores that they refine with mercury.

And for the last five or six years many mine owners have wanted to prohibit this trade, stripping them of the commerce, freedom, and possession that they had long since had.

And [they claim] that they cannot trade in ore (especially that designated for mercury refining, as the origin of the barter was in ores for guaira [processing], Indians with Indians, acquiring it with just title, entering to work the mines at the will of their owners by way of 'varas' [i.e., working so many yards of a vein for a fee]); and all that they possess now is stolen from their mines and huts, where they store that which is extracted due to the risk, and from the mills when they are running, and when they transport it from one place to another, and finally, with such violence that they cannot keep their refining plants safe, nor is it possible, being 'in-house' thieves, having cost them their earnings; and for having permitted them to truck in ore refined by mercury it has followed that the mine owners are quite ruined, because they pick over the ore, taking the best and most grainy, and that which they leave them, for having chosen the good and of highest value, which leaves them to supply themselves with the rest, such that those who refine it [the remainders] lose in it; and thus there is no one who wants to buy ore [directly] from the mines, from which His Majesty loses a great deal, and there would be a great consumption of mercury due to the considerable benefit they would have, and as they are lacking this relief and are unable to make full use of their refineries, they are forced to sell off the remainders [ajenas], in which they lose everything, and the main cause of these thefts and damages has been keeping them so in need of decreed [or drafted, mita] Indians, such that for the lack of them they work their mines with the [wage-earning] mingados, and on top of paying them well, they hide their thefts as they return to the mines; and experience has demonstrated that the ore removed by mita Indians is of greater value than that worked by mingado Indians, due to what they steal from them; and this is so common and excessive now that when it happens that a few Indians collect some ore by just and licit means, it does not amount to the tenth part of what is sold each day in the Indian marketplace [gato o tianguis], in which many Spaniards have come to

buy, both personally and by the hand of yanaconas who rent themselves out for this purpose, and with this opportunity the Indians attempt to rob them, as in fact they do.

And on this they presented certain writings that contained some part of that which has been said before the captain Martín García de Loyola, knight of Calatrava, who had just begun to exercise the office of corregidor of this province with the title of lieutenant captain-general, whose naming gave great contentment to His Excellency, for sending to this villa a minister so much desired, finding in him qualities that made him deserving of such a qualified post, and because it mattered so much to have a person here who feared God and was zealous in serving the lord viceroy, because lacking this it was impossible to discharge the conscience of His Majesty, and also his [the viceroy's], because, with this jurisdiction being in order and agreement, so goes the whole kingdom. And the town council of this villa, with his attendance, by decree banned the barter of ores, enacting several proceedings about it that caused a stir among the Indians for several days (p.151). The corregidor was moved for these reasons, and [also by] seeing with what feeling and vehemence the mine owners extolled him, it seeming to him convenient to remedy it [i.e., overturn the decision], not pointing out, as it was not in his power, the origins and justifications of this trade, as something that had not been examined in depth.

For its remedy [i.e., to reverse the ore bartering ban] they took certain testimonies with great care and much diligence, [directed] by Diego Núñez Bazán, general protector, as he was at that time, of the natives (an ancient person and one who always occupied himself in the things for which he was given charge by His Majesty, of which he has given good account with much satisfaction and clarity); one by the captains of the Indians, taking with them as scribes 'latinized' [Spanish-speaking] yanaconas; roaming through all the veins and mines and determining how many pongos there were in the mountain (these being the porters of the mines), and they encountered a great number, clearly paid in ore, and thus they presented their proof in full form, free of artifice. The corregidor committed this [matter] to these folk so that by every means they would inquire after the truth and so that the pongo Indians would understand that these inquiries were not being done to punish them (as it would be possible not to find a single one of them should they think it a crime to have that job, and the Spaniards could be made to believe that, with which the truth would be obscured), and that this inquiry not impede that which they had done with prominent people of this villa, mine owners and established persons, for whom it was convenient that the Indians possess the ores they sold by licit means, as reward for their labor and sweat, this part and quantity being much more numerous than that from which one could steal, with other points and notices touching upon the wellbeing and defense of these peoples [i.e., Indians], as they are so incapable of acting for their own justice.

And in the interim, when these inquiries were under way, the corregidor and protector advised the lord viceroy as to what happened, and later he dispatched a decree in which he conceded license and authorization to the effect that the Indians of this town site could freely trade in the said ores, without the possibility of any impediment being placed on it.

This decree being published, Father Baena, of the Company of Jesus, in sermons he preached with express words against it, and against the bartering, saying it was illicit and

worth of condemnation, and that those who purchased them [such ores] and those who permitted it were going to hell and were sinning mortally, and were obligated to restitution, and other words of this sort, with which there arose great differences and scandal among all the householders, lettered men, and clergymen of this villa, some preaching against others and obfuscating from the pulpit with passionate words and public censure, which is much done in these new lands and more so in this villa than elsewhere. And as the corregidor advised His Excellency of what had been preached, it upset him greatly that Father Baena sought to resolve so simply, and also condemn, a matter requiring much more counsel and time to examine, as, well, the substance and gravity of it required it, and not to defame the conscience and decree of His Excellency, who with so much consideration and accord had issued it, and as a person who in public treated upon the temporal, and His Majesty having mandated that prelates and preachers not interfere with that, and that if they did so they would be stripped of their holdings and deported.

And it seeming to the lord viceroy that his powers did not extend so far, he wrote to His Majesty of the disorder and liberty there had been in this, requesting a specific decree to deal with it, to which he responded that viceroys had the authority and power of the audiencias, and that they could deport them and do the rest, and that in such matters they had the same authority, according to general powers, and that no new decree or commission was needed, approving and keeping in service those clerics and friars who had been deported and taken to Castile, and that he should do the same to those who interfered with secular considerations (because nothing tires a prince more, he being in the midst of clarifying and perfecting justice in his realm and having to reissue certain things that have already been cited and go on opening the path to other invisible things, in order to handle them in their time and place, which the people have not caught up to, when along comes a preacher acting like a governor and arrogantly denouncing them, many times with disrespectful words, full of pride and presumption, from which the vulgar take occasion to gossip about the princes and governor, making them unpopular).

And it seeming to the lord viceroy that it was well to fix the matter of the padre, so as to end the scandal he had raised, he ordered him later to go down to Lima, and to ratify this order he called a meeting of the most notable of lettered jurists available in that city and of the most eminent and resolute theologians and canon lawyers, the most virtuous individuals, and dispassionate, fearful of Our Lord, from whose consciences one could not presume anything that would be against that of His Excellency and their own.

And with their agreement and opinion he issued another decree, in which he ordered that the Indians may sell the ores of the mountain freely, and that the Spaniards may freely buy them, and that it be made known to the Indians that they could enjoy this benefit. And that beyond the reasons that had moved him to mandate this, there had been discovered other benefits to the service of God and of His Majesty. And for the security of the consciences of those who traded with the natives, he ordered a consultation with serious persons of science and conscience, and took their opinion of the argument, claim, and boldness that the padre had in treating on that which he preached; and so that the Indians could deal and trade without some hindrance or impediment being placed before

them in buying ores from whomever was selling them; and so that the corregidor not impede them, and that whoever hindered them would be punished, under penalty of suspension [of office] and [a fine of] 2,000 pesos for the chamber and hospital of this villa, reproaching in the decree the little zeal some persons have for the wellbeing of the Indians, moved by their private interests, being the cause of scandal and other disruptions, ordering that they read to and give the Indians to understand this in their language, so that all understand this as a licit thing, good and permitted.

Your Excellency already sees the wisdom of this decree and the zeal the lord viceroy had for the wellbeing of the natives, whom they try to fatigue by so many paths. And because it is a hateful matter over which so many difficulties have arisen, and will likely come before Your Excellency with many novelties, I did not wish to be too short about it, and thus I place here the opinions given by the men of letters, with all that has been written in this case up until today, the same which the lord viceroy sent to Corregidor Loyola, authenticated by Juan Gutiérrez de Molina, secretary of that royal audiencia, in which it says that the originals remained in power of His Excellency.

Opinions of the lord licenciates Cerezuela and Antonio Gutiérrez de Ulloa, apostolic inquisitors of this realm.

Having seen the decree of His Excellency and the information and letters concerning the dealing in the ores exchanged by the Indians in Potosi, it appears to us that the said decree is just, and this being so, His Excellency should order it to be observed and put into execution and that order be given to halt the things done to the contrary, along with the scandal that has followed from this, according to his better judgment. In Los Reyes [Lima], on the 5th of January, 1580. The Licenciate Cerezuela. The Licenciate Antonio Gutiérrez de Ulloa.

Opinion of the Father Teacher Friar Luis López, of the Order of St. Augustine, Professor of Vespers in Theology of the University of the City of Los Reyes [Lima].

Having seen the report of the protector of the natives regarding the dealing that the Indians have in Potosi related to the ores with which they barter, and buy, and sell, and also the decree given by His Excellency, and understanding the difference that have arisen regarding this matter in the said villa of Potosi among certain preachers, it seems to me that the decree is rightly issued and that it would not be just to take this trade away from the Indians. And as to the claim that the ores sold are stolen, it is presumption without sufficient basis to prohibit and punish. And thus they should not preach the contrary, but rather each should watch what they buy. And likewise I do not consider it advisable to preach nor treat upon the possession the Indians have and have acquired, as it would be to give them license to steal and take without fear whatever they can, or happen upon, aside from other inconveniences that may follow from this matter, the basis and principle of the conquest of this land being in so many opinions. Therefore, the preachers of that villa should be advised that they should not touch upon this matter any more. The Teacher Friar Luis López.

Opinion of the Father Teacher Friar Miguel Adriano, of the Order of St. Dominic, and Professor de Prima of Theology in the University of Los Reyes [Lima].

Having seen the report made in the villa of Potosí by Captain Loyola, as requested by the protector of the Indians, in order to ascertain what had been opposed regarding the trade the Indians of that villa have had for the last thirty years, dealing in ores, from that it seems to me, from the report, that Your Excellency ought to order that what Your Excellency decreed be followed: that the said Indians may trade with ores without any impediment whatsoever being placed upon them, because although some of the Indians that deal in the said form trade in ore that is stolen or acquired by illicit means, not for this should an infinite number of other Indians be defrauded or damned who with licit titles possess the said ores with which they trade. And from the said report it is clear that there are many licit and honest means by which the said Indians possess the said ore. And thus, although at times stolen ore reaches the gato and market, not for this should the governor, nor may he, prohibit the said trade, as per the doctrine of St. Thomas in the Secunda segundae, theme 196, article 2, ad quartum, where it is taught that when a governor must prohibit the use of things that can be exercised both well and badly; and the contrary would be damaging to the Indians. And those who buy are obligated to examine whether the Indian brings stolen ore, as there are so many licit means of coming to possess it, nor should they presume anything of anyone about that, or judge it, although it is common that some bring it with bad title from time to time. And it seems to me that Your Excellency ought to address by decree the scandal that has arisen around this matter in the villa of Potosí. This it seems to me in accordance with the doctrine of St. Thomas. The Teacher Friar Miguel de Adriano.

Opinion of the Drs. Hieronimo López Guarnido, Professor of Law in the University of Los Reyes, and Friar Pedro Gutiérrez Flores, and Dr. Fajardo.

Having seen the decree that Your Excellency issued so that the Indians of the town site of Potosí may sell ores and deal in them, along with the report that in the said town site was done before its justice by request of the protector general of the Indians, upon the custom there has been, and still is, to pay the Indians who work in ores, and that likewise that they pay for certain victuals sold to them in ore, and other works of bridges [supports] and repairs they do in the mines, it seems to us that the decree of His Excellency is just and accords with the conscience. It is very well given, and with great rectitude, and it would be far outside this should the Indians be prohibited the said commerce and trade on the pretext that the mine owners take to saying that these same ores they sell are stolen. Because, as the said Indians are free persons, and this trade and commerce of buying and selling ore is permitted and not prohibited by His Majesty, even if there had not been the above-mentioned report or so much notoriety that there are many mines and veins where the Indians might be; one would have to presume just title for him who sells and buys, and not to presume that they [the ores] are stolen and badly acquired, because this would be to presume against all law.

And although some Indians have been accustomed to stealing some ore (p.154), for that one may not presume that all those [ores] sold are stolen. And he who might say they are

stolen ought to prove it, and may not ask of the Indian who sells them to demonstrate where it came from, because there is not a single law is he obligated to display title to that which he possesses. And when it should seem that some Indian has stolen the ore he is selling, he who alleges that it has been stolen from him may request it and order [the Indian] punished once it has been proved, and not wanting that for the crime of some the trade and licit commerce be impeded, doing thus being a general presumption of a trespass against the law, and further being so much in damage to the common good, to the Indians, and to the kingdom, and to the augmentation of the royal treasury. And thus it is just that His Excellency order with rigor that they follow the said allowance, so justly possessed, and that they put in place a remedy to the scandal caused in this matter by the clergymen who without the least reason set about condemning in public as unjust the said commerce and trade, against that which was ordered by His Excellency, in such a manner that all understand that His Excellency, with just and Christian heart, allowed what he had to. Done on 5 January 1580. The Dr. Friar Pedro Gutiérrez Flores, the Dr. Hieronimo López Guarnido, the Dr. Fajardo.

Having seen the orders of His Excellency and resolutions of these opinions, the differences ceased, as did the scandal that had come to pass, and thus everyone observed silence on this matter, some members of the Order of St. Dominic preaching in defense of it, and of the obligations that we had to these people [i.e., native Andeans]. And especially Father Francisco Vázquez, of the said order, gave a sermon in approval of the barter that was later written down and formally recognized before the corregidor and a public scribe. But having gone the lord don Francisco de Toledo and with the arrival of the lord don Martín Enríquez the owners of the mines returned once again to treat of this matter with heat, sending a procurador with the sole purpose of begging His Excellency to suspend the barter, explaining to him the past reasons. And the lord viceroy, among the chapters of instruction that he gave to Juan Davila, householder of Arequipa, whom he named as corregidor of this province, as a person experienced in its governance for having held a position in the introduction of mercury, and for being a good citizen [republicano], he ordered that according to the said chapter there be made an investigation into the case so as to provide remedy, so that the thefts the mine owners said they suffered might cease, giving in this the order that would be most convenient, such that the natives would receive no harm, nor that they should be impeded in the trade they had in ore, [but] punishing thefts.

Upon his arrival in this villa don Juan took sworn testimony from trustworthy people of authority, many of them owners of mines, plus the alcalde mayor, and the inspectors, and other persons who had experience in the mountain, from whose declarations it was certified with total probability, examining the witnesses in their presence, that some mine owners were accustomed to paying the Indians who worked in their mines in ore. And for not having an allotment of Indians sufficient to meet their needs, they hired Indians, these being necessary for the working of their mines, and beyond paying them their day wage, so as to make them grateful and content so they would return, they allowed them to take a piece of ore; and as these 'minga' workers were so many, great was the number of them who gathered in the gato [indigenous marketplace]. And also that on the mountain there circulated no other money besides ore, with which the mine overseers and pongos pay for

the food that is carried up to the mountain for sale, plus fruits and other refreshments; and Indian women, in exchange for the ore, give them their own persons, and their mothers take them up there to the mountain for this purpose; and some of the mine owners send ore down to the gato to be sold, and sell it to Indians at the mouth of the mine; and that the Indians [themselves] have mines in the mountain; and the pongos they pay in ore; and that the mine overseers employed by the mine owners sell ore to the Indians, such that after two or three years they leave the mountain rich men; and that there are more than 5,000 Indians occupied in working the mountain; and that the 'vara' Indians take out much ore from the mines they work by their own labor, the same which is proved by the quintos they paid in the adits from which they exited, assuring as well that in every occasion and conjuncture the Indians do not pardon the ore that may be stolen, not being such good Christians as this (p.155), and it is a greater quantity that which they acquire by good title than that which is stolen. And on this matter there is the testimony of Hernando de Medina, public notary of this villa, in which it says, among other proceedings that were done for the clarification and solution of this business in the time of the captain Martín García de Loyola, he went on his order and mandate to place himself one day in Sojo's adit so that he could take accounts from the Indians that exited there that day, beginning in the morning; and it was ascertained that 250 'ore Indians' [i.e., mineworkers paid in ore] went out, all of whom had entered with license from the owners to work the mines, and all of them gave and left at the door of the adit, according to the rights charged on exit, a portion of ore. And if this was found true in only one adit, how might it have been if they did this proceeding at all the mines.

This investigation finished, so that its state and that which the witnesses had testified could go for examination to the father teacher Geronimo Ruiz Portillo, who advised His Excellency of that which was needed for the discharge of his conscience, touching upon the governance of this villa, all quite straightened for the service of God, it was thus dispatched to the lord viceroy by don Juan Dávila, and later he gave it, as he had received it, to Dr. José de Acosta, of the Company of Jesus, a most learned person and of right conscience, and a gifted preacher, and who had the run of this villa for having been in it not having been among those who approved the barter, as was true of all of those of his order. He was most burdened to consider well the resolution he had to make, as he sought nothing more than the service of Our Lord and of His Majesty, and the discharge of his royal conscience, which had been placed in his hands. And having seen the declarations and proofs, he gave the following opinion:

Opinion of Father Acosta, of the Company of Jesus.

Having seen the report that by order of His Excellency was done in Potosí regarding the barter of ores that the Indians sell in gato or square, and having seen as well the opinions of the other persons who from there have written, that which emerges first is that Your Excellency ought not to end or prohibit the said barter and commerce in ores that the Indians practice, because, according to how it appears from the said reports and opinions, that although a large portion of the ore the Indians sell is stolen, it does not however amount to the greater part, but is rather understood to be the lesser, that which is stolen, the majority being had by many good and licit means, which are mentioned in the

questionnaire. And this being thus, it would be against reason and conscience to deny the Indians their licit trade and gain, as they are free persons and vassals of His Majesty, and in that which is possible they ought to be favored, we living in their land and enriching ourselves from it and of their labors, and above all, the Indians having been in use and possession of the said trade and barter for so many years. It would also be against the universal good to halt the said commerce, as there would follow a notable break in the royal fifths, and in the refineries of both Indians and Spaniards, who benefit from the buying and selling of ores in the gato, and even in the grinding of the stamp-mills would to a great degree diminish, all which together would result in damage to the republic.

But, by having approved and confirmed, Your Excellency, the said barter of ores, silencing those who have sought and seek to contradict it, there could follow damage to the conscience of the Indians, who, for ignorance or malice, might take the occasion to steal more and say that they have license from the governor for it, and in harm to the mine owners as the thefts climb, which could come to be many, there appears the second thing for which Your Excellency has obligation, in good conscience, to give order such that the thefts be avoided and remedied by the most convenient and reasonable means that may offer themselves. Those which now come to mind are the following:

First, that it be published and preached to the natives that although the king, and Your Excellency in his name, gives them the free opportunity to sell and barter ores, neither the law of God nor that of the king gives license to steal ores from anyone, but rather prohibit it and punish it with rigor.

Second, justice, especially the mine magistrate and mountain inspectors, must take special care to investigate and punish when there is found some notable theft of ore, and that the punishment be public in the gato, where the ore is bartered, and the mine owners, as it is in their best interest, watch over their estates and denounce the thefts done to them.

Third, that barter of ores not be permitted the Indians except in the gato or public square, which is designated for this purpose, under penalty of the loss of the ore, half for the judge and denouncer, and the other half for the hospital.

Fourth, that it not be permitted for Spaniards to barter in the gato, as they do much harm to the Indians, but rather they barter by way of their yanaconas or other Indians, as is mandated by the town council of Potosí.

With this it seems that it is possible to do this in compliance with the obligations of conscience and justice for now.

Finally, it appears that Your Excellency ought to order, given the mandate that ought to be observed, that the disputes and contradictions that cause perturbation and scandal must cease, according to the proceedings that have been done and by the final resolution of Your Excellency in this case, that private persons may with full security buy and barter ores in the gato without the least worry or further inquiry. And the confessors should not

place an impediment and deny absolution except when a penitent has bought or bartered [ore] from someone he know stole it, and much less should those who preach or speak in public condemn the trade and commerce that by the governor with so much consideration is not only permitted, but also approved and confirmed, as a licit thing according to conscience and also useful to the republic. – José de Acosta.

And with this opinion they wrote to this villa, having passed before all the lettered men and theologians of that city of Los Reyes.

This opinion having been given, the lord viceroy dispatched an order that ore not be exchanged in the Indian township [ranchería], according to paragraph three. And later he sent, in order to placate the consciences of those who sustain themselves by the barter of ores, to the father teacher Gerónimo Ruiz Portillo, of the Company of Jesus, and Commissary of the Holy Office of this province, and famous preacher and person of letters and of exemplary life, and founder of the most principal houses of his order in this kingdom, and of great experience and opinion in such business matters due to his having seen them pass by in his communications with the lord viceroys. And it did not arrive easily in his hands, when Our Lord was pleased to take His Excellency to him. It was great the desire that all knew he had to try and serve God and his king in governing a land so complex and different from that of New Spain. And thus, in that which he lived, he governed with perfect satisfaction for all, proving himself quite zealous for the wellbeing and conservation of the natives.

In his time there arrived in this villa from the kingdoms of Castile don Alonso Ortiz de Leiva, native of Seville, as corregidor and chief justice of this province, whose mandate His Majesty gave in Badajoz on 19 September [15]80. And he presented himself with it in the city of La Plata on 3 Febraury [15]83, and brought with him other greater powers regarding his governance, which in no manner, due to the inconveniences that would follow, did the lord viceroy comply, nor did he grant him any more powers than those belonging to a simple corregidor. And with his arrival it appeared to those impassioned about and seeking impede the barter a good occasion to continue their demand, which is what they did. And Diego Núñez Balzán wrote the lord viceroy, and when these letters arrived in Lima he was already dead, and thus they were opened by the Royal Audiencia, which had taken over governing, and by accord among the president and judges two letters were dispatched, one for the corregidor and the other for the protector. And this they said in the following manner:

'Diego Núñez Bazán, protector of the natives of the Imperial Villa of Potosí. A letter of 1 March last year to the lord viceroy don Martín Enríquez, be he now in Glory, was received, and due to his end and death it was seen in this royal audiencia, to which, as you will have seen, according to dispatches that have been sent to the town council of that villa, befalls the general governance of this kingdom. And thus you shall follow in providing it with an account of that with which the lord viceroy had charged you to provide for the defense and protection of those natives, and whatever else would be (p.157) convenient for them. And likewise you are thanked for the notice that you included in your letter, regarding the desire of some to impede the Indians from the sale

of ores in the tianguis [indigenous marketplace], about which it was written to the corregidor not to order something new nor a prohibition of this, nor to write about it or accept any petition or report. And you are advised thus so that you shall understand and seek compliance with this and all else that is befitting for the protection and good treatment of the Indians, as is trusted of your person, may Our Lord protect you. From Los Reyes, on 3 April 1583. – Licenciate Ramírez de Cartagena. – Licenciate Recalde. – Dr. Arteaga.

In accordance with that which was mandated by the royal audiencia in this letter, and that written to the corregidor, which contained the same substance, don Alonso de Leiva issued a decree in which he ordered that no proceedings be carried out on the business of ore, such that the thing stopped there for the time being. And not much time passed until by way of the factor Juan Lozano Machuca there arose another persecution, masking his intent with the royal voice, presenting as which that which was black with some appearance, as a person of greater genius, forming a junta of certain mine owners to whom he proposed that, if they wanted a remedy so that the barter and thefts they suffered might cease, that they make a donation to His Majesty of the ores of the gato market as things that were stolen from their mines, and that in the donation they would give him power as if to a royal minister in order to follow the matter through, promising them great hopes. The same which he did motivated by some passion, as in this kingdom this is the common path, to negotiate by cunning that which one cannot pursue by justice. And as it had been ordered that no one receive anything written about the bartering nor carry out any proceeding that would infringe on it or impede it, he found this means to undermine it, because as it touched upon the Royal Treasury the justices could not keep him from submitting his petitions and writings, which proceeded from the donation. The mine owners did not do much in the way of begging, acting as though they had done a great service to the king in giving him the capital of so many men who had cast their silver in the form of ores from the gato, and with good faith and just title and express permission and right to buy them freely.

Signed as this donation was by many people, the factor placed a demand before the corregidor, alleging that it greatly befitted the service of His Majesty to close the said gato, and that it not be allowed to sell in it ores for amalgamation; and that for this reason there was no wind furnace [guaira], a most important thing since that which was in His Majesty's interest was the royal fifths; and beyond the gain they made from the silver ores, the Indians also worked mines of galena [soroche], with which they mixed the good ore and which ordinarily carried values of only two or three pesos [per hundredweight], and it could not be refined by amalgamation or smelting nor by itself alone, with which they augmented the royal fifths; and other reasons alluding to the damages that the mine operators claimed were caused them by the barter, pleading for the confiscation and embargo of the ores presently there, which was their intent and the target they shot for. And to this request there responded the Licenciate don Francisco de Vera, protector general named by the royal audiencia, who is a son of the lord Licenciate Francisco de Vera, one of its senior judges [oidor], that about a year and a half ago arrived in this plaza, and that in effect satisfied that alleged by the said factor, which were impertinent things, because His Majesty, through the practice of mercury amalgamation, greatly

augments his fifths, both by the consumption there is of mercury as by the taxes on the silver refined with it, and the Indians do not refrain from refining the rich ore by guaira.

The corregidor issued a decree to keep the said barter, which was then appealed by the factor, and in the royal audiencia they saw the decrees and ordered that for the time being there be no innovation in that touching upon the barter. And later they dispatched a decree in which on this license and permission was given to the justices of this villa, except the corregidor, in order that they could barter for ore in the gato, with which they were to guard the order that was already given with regard to buying. And this decree seems to go against some of the [learned] opinions and orders of the lord viceroys, which charge that the judges take particular care to punish the thefts, because if those who ought to be free from these objects are bartering, (p.158) one should not expect good administration, and it is to give opportunity and encouragement to the Indians to do worse things, seeing that the justices barter, it seeming to them that it is a most approved thing. And I do not know if there could be justification in this trade with the judges having a hand in it, as it would concern them the punishment of the thefts, which they ought to investigate with diligence. And I understand that these gentlemen foundered in giving this license, taking for licit this trade and the gain in the royal fifths that would follow by this path, and that in that time there was a scarcity of silver in the town and they opened the door so that those who had it would use it to buy ore and would thus fatten the refineries, that without this means, due to hesitation and other inconveniences they did not due so [i.e., those with silver did not part with it].

[f.72] Of the dangers faced by the Indians who remove the ore from the mines and how they come to this against their will.

And so that Your Excellency may see and better understand the right the Indians have to trade ore, I shall point out the risk with which they retrieve it from the mines, and the blood it costs, and how their lives are endangered by the mines' depth and bad passages, from which one may better infer the justice [of their claim] and also what a rigorous executioner this mountain has been for this nation, as each day it consumes them and finishes them off, and thus their lives are spoiled with the fear of death.

And it is especially admirable that despite their being cowardly and short of will by nature, yet they have enough [courage] to risk themselves here where the most willful lose theirs. And thus it happens each day that a thousand deaths and disasters befall them, and [meanwhile] people of consideration and discourse pay no attention to the risks they suffer in working the mountain, and bring them from their villages and native lands, leaving behind their houses and cattle, separating, with many tears, fathers and mothers from their children, it seeming to them that they shall never see each other again, and they will be carried off to undertake labors and tasks they neither know nor understand, nor do they live with greed for treasure, and they are taken where they hear of the disastrous cases that commonly befall them, and to see returning many afflicted women without their husbands, and many orphans without their parents.

Afraid of these things, they leave from these places with violence and very much against their will, since without it [violence] it would be impossible to remove them from their houses and lands. And some, in order to escape this force, give fifteen or twenty head of cattle, which is all they own, and some send other Indians to serve in their place.

And of the sad things that have happened to these people, of which memory is fresh, I shall relay several to Your Excellency so that you will understand the labors they suffer and how much this ore costs them, such that we could say it was rather blood than ore. And such was the case in the mine they call La Muñiza, in the Veta Rica, where a Spaniard, working in company with another, brought fifty-six Indians; with twenty-eight he worked by day, and with the rest, by night. The mine was dangerous, especially in a gallery they had expanded to a large degree, such that when Francisco de Oruño entered to inspect it, he being the [royal] inspector at the time, knowing the risk the Indians faced, he ordered the work suspended until certain repairs necessary for security were done, even issuing a formal decree to this effect. And the owner of the mine alleged in writing that these repairs were not necessary, and that the decree had been animated by a passion against him, that the mine was quite secure, appealing and filing certain proceedings. With this these sad people came to perish, as only two days after this the mine collapsed, catching all twenty-eight Indians underground, the ones sent to work at night.

And the next day in the morning all the judges went up the mountain, accompanied by a large number of Indians and their wives, children, and relatives who rent the air with their cries and wails. And so much earth and rock fell upon them [the buried miners] that they were unable to pull them out straightaway, but rather with the passing of time, as they cleared it away, they located them. The Spaniard was jailed, and after much trial and detention, he was condemned by the Royal Audiencia to a fine of 8,000 assayed pesos, part for the chamber and the rest to be distributed among the widows according to the number of children they had. From this you can see how humble the Indians are, and simple-minded, as they had ample reason not to even hear of or see the mine, yet they wished to offer their lives rather than let their master down. And thus you may understand how much they need defense and protection.

Some time ago, it happened that a Portuguese entered with seven Indians to work a mine, shifting the labor from one part to another. And reaching the deepest part, where they sought to start working again, rocks began to fall away in the mine beneath them and earth came down from above, and to shelter themselves from this five of them put themselves in a cave and the other two pressed themselves into another smaller space, where they could defend themselves against all that was falling, which was so much that it filled the better part of the mine, leaving them alive in those cavities left by the rubble. Once known in the town, Diego Bravo, magistrate of mines, and also the inspectors, made a great effort to rescue these people, sending many Indians up the mountain to pull apart and remove the earth that had fallen, but it was to no effect, because no sooner did they remove some when more began to fall.

And the next day, somewhat late, they pulled out the two Indians who were not enclosed by so much earth. The Indians who went in to clear the mine by day and by night did so

at no small risk to their lives, due to the earth that continued to fall, and as the space in which they had to work could not accommodate many people; those who worked did all they could but it was to no avail. The Spaniard [sic] and the five Indians had space to move around, as the cave they were in was rather large. This encouraged those outside, giving them hope that they would surely defeat the earth, and [from the cave] the Portuguese told them not to abandon them nor tire out, as God would be served to free them from that anguish and tribulation, and they were controlling themselves to resist hunger, although the cold had left them fatigued, and to sustain themselves they had eaten their shoes. And the Indians also spoke. And in this way they passed four or five days, with people always arriving with refreshments so that they could work with more effort. And once it became clear that it would not be possible to remove them, a Jesuit father went down to confess them, and the Spaniard [sic] made a will, and thus they bid farewell to them with many sighs on both sides, the Indians saying some silly, rustic things to pass along to their wives and children, and thus they died without any means of remedy. The one who lived longest was a somewhat Latinized Indian, who said that the Spaniard was no longer speaking, that he had decided to go to sleep, and that the rest of his companions were there dead beside him.

Working one night at a water-powered refinery along the riverbank here four Indians were killed in the ore crusher (mortero) when a wall collapsed and smashed them. And in another mill, an Indian climbing up from the ore crusher was caught in the head by a cam, which smashed him to pieces. And only a few days ago seven or eight Indians died in the mountain, and if one had to write about this at length, one would expend much paper.

And it is common that they bring down dead [workers], and others with cracked skulls and broken legs, and each day in the mills they are wounded. And the simple facts of working at night, and in such a cold country, and tending the ore crushers, which is the hardest work due to the dust they get in the eyes and mouth, all this is enough to do them great harm. And thus the hospital is full of wounded Indians, and more than fifty of them die each year, and this fierce beast swallows them alive. And at the moment, between the tribunals of the judge of native affairs and the mine magistrate, they are pursuing more than seventy criminal cases related to Indian deaths.

I do not wish to embellish this further, as it is already clear that if these people were civilized [políticas] and in possession of reason, they could intimate this case such that what should be done would be taken care of for them, and that, in a work rotation so large, it is of little consequence that some advantage should be taken, and, well, the intention of His Majesty in ordering them to come to these mines and permitting it, was so that they might take advantage and become rich, being entirely of their own free will, because if it were against this His Majesty could not detain them for a single day in Potosí.

The same which is clearly seen in the proceeding that was done with them in the year 1552, our lord the emperor [Charles V], may he be in holy glory, having been informed that the Indians who lived in the workings of these mines were oppressed and held

against their will, and that the encomenderos sent them so that they would give them each week a certain quantity of silver. And this they reported in such a way that to discharge his royal conscience he sent a decree to the lord viceroy don Antonio de Mendoza, in which he ordered that all the Indians who worked in the mines be given license and freedom so that they may return to their villages.

The royal audiencia of Los Reyes put this decree into effect, the said lord viceroy being already dead, and named for it was Lorenzo de Estupiñán, householder of Huánuco, a businessman who brought with him a commission to audit the land regarding the excess work quota burdening the Indians. And arriving as he did in this villa, with greater rigor than was necessary he ordered that all the Indians come out, lining up according to their homelands [parcialidades], depopulating the entire area, sending out factions that later left him, and demolishing some of their houses. The Indians were aghast to see this, and they felt it so deeply that they took it as a great affront and vexation, and they said to Pablo de Meneses, who was then corregidor, that how could be sent by the apo, which is to say the supreme lord, a crazy man to govern, and where were they supposed to get silver for their tributes if they could not work the mines of this mountain? And thus he removed a great number of people who tried to return to the town site but there was no way to do so without impediment under threat of hanging; and others, left on the road, returned to their homelands. Seeing this, Estupiñán took it for testimony and returned.

And at this time there arrived the lord [viceroy] marguis de Cañete, and from then on much care was taken in the conservation and growth of this villa. And it is worth noting that when this happened the mines were near the surface of the land, with no depth whatsoever, such that with little effort and without risk to their lives, [the native miners] had great opportunity, possessing or having pass through their hands all the silver that came from this mountain, and not with the danger and servitude and little gain that there is now, if they did not have to have more than the day wage that has always been understood to be insufficient without means to have some other gains. And it is clear that it cannot sustain an Indian, with children, and wife, with three and a half reales in such an expensive land, without having recourse to some subsistence plot [chacaras], and also pay his tribute. And if there were no limitation on the day wage with certain equanimity in order to conserve these two peoples. And that of the Spaniards is done by the pretending to ignore the benefit and grant given to them in the form of Indians, that they can remain so in need of this aid that even if they were to divide with them half the ore taken out, they could not keep them contented nor do I believe the contract would be fair, as the Indians put in their persons, risking their lives, and in mines that lacking Indians would produce no profit; and in abandonment they would be judged as belonging to the natives, as persons who would work them.

Of the manner the Indians have of selling the ore and other details pertaining to the matter of barter.

And having treated on how with so much risk and danger the natives take out ore from the mines, it would be right to give account to Your Excellency of the fruits and interests that follow on the other side to the Spaniards who are dependent on this assistance, being a republic that has no other recourse than the refining and sale of ores, and this relying on the Indians allotted to them by the mercy of His Majesty and Your Excellency, explaining the way in which the Indians sell in the gato, and of the [ores'] purity and quantity, and the methods by which the Spaniards buy and sell them, from which much gain is made for the royal treasury and also to keep many Indians in this town site by their own will, which is what His Majesty wants, and many other benefits no less necessary and profitable, as the same [learned] opinions note, the same which would have been much more in its favor had they observed that it is with them [the Indians] that this town site had been populated, and they are brought against their will, and the lives it costs to take out the ore, and the remaining things that were written about this, by which the lettered men could better discover the rights of the Indians and the justification of the barter.

Next to the main plaza of this villa is that of the ores, in the most public space and of most traffic of justices and concourse of Spaniards that exists in this town site. This square has many tents, where they sell a great quantity of coca, which is the business and farm product of the householders of Cusco (161); the baskets of coca are placed at the entrances with many Indian women who barter them, both for ores and for silver. And in this square they sell galena [soroche], and mixtures, and greases for the smelting of ore by guaira, along with a thousand other little things. And on the side that abuts the buildings of the town hall the Indian men and women sit very close together, in file, with a certain order; and it seems to me there are some 400 or 500 persons who come with ore to sell, especially on Thursday, Friday, and Saturday, because on the other days, being early in the week, not so many people come, as they are just beginning to take out ore. As for the tacana and rich ore for smelting by guaira, those who sell it sit apart, and next to them those with rich ore for amalgamation, and after this [those with] common ores, and farther below, towards the convent of the Name of Jesus, which falls on this square, the ore of [i.e., traded for] coca.

The people gather for their fair from about seven or eight in the morning, and from this hour the buying began with the guaira smelters (as they are preferred to those who barter on behalf of Spaniards), and while these were buying the yanacona guaira smelters [working] for Spaniards could not trade (entering as they did around 10:00, when they raised the host in the main church, because here there is no public clock). Now they do not follow this order, but rather all enter together, as there are some rich Spaniards who buy rich ores somewhat to the disadvantage of the guaira smelters. Diego Bravo (who in every way has shown himself inclined to favor these people and I can truthfully say that he executes his functions with all rectitude), to avoid this, had some small pillars placed that would be taken as a sign and boundary marker for the Indians with guaira ore, in which site no yanacona or Spaniard was allowed to enter and barter, placing some Indian bailiffs who would guard the entrance; and in the rest of the square was placed the ore for amalgamation, where anyone could enter and buy when they wanted, as if by the hand of yanaconas.

The Indians who bring the rich ore sit in this place, and the rest do the same, it seeming to them that their ore is of not of poorer condition, although it is not of that quality, and

[they fear] that they would receive a lower price if made to place it [their ore] somewhere outside that spot, and for this reason it is necessary that the barterers [i.e., buyers] enter that place. And it has not seemed sufficient remedy to assign places in order to impede the inconvenience caused to the guaira refiners by the other barterers, and that they ought to follow the old order, which dictated that nobody enter the gato to barter until the guaira refiners had had the first hour after opening to make their purchases. And although in this way they remedied some of the damage that these Indians might receive, as I understand it some who bring ore withhold it from sale until the yanaconas of the Spaniards enter, as persons who pay them more and who are more anxious to buy.

The prices of these types of ore differ, just as these do in their purity and quality. Of the rich [type] there is ore that sells for 10 pesos corrientes per hundredweight, and all the prices are understood in terms of this unit, eight reales to the peso, as it circulates in this province, and from this price up to 100 pesos they sell a hundredweight. And thus there is no one who buys a hundredweight or even a half. In order to put together one you have to go gathering it up, buying a little from each Indian. The ore at 100 pesos would yield fifty marks [per hundredweight], and this assayed; and that of fifty, at sixty; and that of forty, at fifty; and that of thirty, at forty; and that of twenty, at twenty-five; and that of fifteen, at eighteen or twenty; and that of ten, at twelve or thirteen. The ore for amalgamation also has various prices, as there is ore that one buys at two pesos per hundredweight, and at three, and four, up to eight, which is the highest. And the yield of these ore varieties is: that of two [pesos], at three [marks], or at three and two tomines, up to three and a half assayed; that of three, at four, up to four and a half; and that of four, at five; and that of five, at six; and that of six, at seven; and that of seven and eight, at nine and ten.

The third type of ore is bartered for coca and bread. And the Indians give for a basket of coca, which is given to them [i.e., the sellers] by a Spaniard, which is commonly valued on account at four or four and a half assayed pesos, six hundredweight; and they give to the Indian man or woman who barters it, there being many who occupy themselves in this, two pesos corrientes for their work. And this ore goes for seven assayed tomines [i.e., 7/8 of a peso per quintal], and it yields some three [marks], a bit more or less.

Spaniards used to enter the square among the Indians and personally barter, but it was decreed that they not do so due to the advantage they had in buying and for some mistreatments the Indians received from them. And because there are many who barter by way of yanaconas as it is against the authorities to buy personally, he who might try to do it, to the detriment of all the others, ought to be punished, being persons of low condition. These yanacona Indians by whom they barter are well paid, in addition to what they themselves steal, because there is no accounting for that beyond which they wish to give up, and some earn up to two three pesos [a day], but ordinarily it is four reales. It would be a most just thing to observe the old order regarding the barter of ore, which is that before they raise the host in the main church no Indian could enter the square to buy on behalf of a Spaniard, leaving the gato open only to the guaira smelters, there being many who sustain themselves by this type of refining.

And the Spaniards have taken this ore to refine by mercury, when it would be much better to conserve the guaira. To remedy this the lord viceroy don Francisco de Toledo ordered that the day wages paid to the Indians of the mountain be in ore, with the sole end that they might have by their own intelligence, silver. And as the value of the ores has diminished, they revoked this order and mandated that they be paid in reales.

And so that [the Indians] would have a hand in the ore and free entry into the mines, Toledo ceded them a space worthy of their genius and customs, for having understood that the owners of the mines, seeing that by way of mercury they could have the fruit of the ores without needing to share them at all with the 'by-the-yard' Indian mineworkers [indios varas] as they had done up to that time, they began to put doors and locks on some mines so as to have the ores more guarded and so that the Indians could not enter into them, a thing they felt dearly. And it caused them great suffering, the invention of mercury [amalgamation], as it deprived them of their livelihoods, and they had no other means to help themselves nor to pay their tributes if not by way of the day wage, having possessed all the richness and surplus of the past, with which had been conserved and from which hung, thanks to them, the profit and general improvement of the entire kingdom, and thus the refining by guaira would be lost, as important a thing as it was, since it produced the fruit of its own harvest, with no expenditure on mercury. But as the mine owners had gone down a path so damaging to this people, don Juan Dávila was ordered to go up the mountain to remove the doors they had on their mines, so that they [the Indians] would work them, with a summons that they would be taken for abandoned, ordering that the mine owners be obligated to give and share with the Indians of this villa the fourth part of the mines they possessed; and that the Indians choose the part and sections that they wished, in order to head off the inconvenience that would have followed had they done otherwise; and that those be given to them freely, to work by the yard, which up until then they had done; and that of the ore they took out the mine owner would sell them, the same Indians who had worked it, one third; and if in this there was any disagreement, they would have the inspectors come, who were charged with making certain the Indians were satisfied in every way, and that a quarter of the mines was shared with the Indians; and that the owner had complied by selling them a third of the ore that they removed.

It seems that this means, in that above, with some moderation inclined toward the mine owners in whose favor His Excellency gave them to understand that it was done, as someone who sought to conserve these two republics [of Indians and Spaniards], as since according to custom the mine administrators used to give all the mines to the Indians by the yard, so it was not much more to give them a quarter. And this was not done to restrict and narrow the gains of the natives, but rather to take into account the poverty of the mines, and that the fourth of the yards that the Indians had to select to work would have to contain value, and in the other three quarters that were not such they would come to an agreement without an intermediary. And this same motive was had in ordering them to sell a third of the ore that was extracted, to act as one who greatly moderates that in which he deals; as before they used to sell all of it, it was hardly unreasonable to give them a third for their money, they keeping the other two thirds; and from this it followed that the Indian selected the better and richer portion for the guaira, and it was something

if the third was thus [i.e., so rich], (p.163) and the other two thirds would be offered by the mine administrator, if the Indian wanted them, for a good price as ore that was 'tarnished' [desflorado]. And the prince must have all this astuteness and cleverness in governing his businesses, especially in things relating to the Indians, as they are trading with a people [i.e., the Spanish] more astute and sagacious, and the Indians have not the least artifice by which to turn things their way. And since to the Spaniards there come great gains due to the [crown-subsidized] mercury and help from the Indians [i.e., the mita], it was not just to rob them of this succor. This decree has come to lose its power, or the Indians do not have it to push for its enforcement, or there are not enough rich ores such that those for mercury refining (and rich ones when they find them) are taken out by mingas [hired workers].

The rich ores, it is right to inform Your Excellency, are not found by the Indians in the works pursued by the mine owners in the chiles and depths, as they no longer have them and they are of such low quality that they do not reach two and a half pesos [per hundredweight], except some mines in the Tin, Rica, and Centeno veins, which is ore of above five pesos [per hundredweight]. The Indians take the rich ore from the upper parts, and bridges, and old barrigas, and with so much risk that the Indian hangs from a rope and picks at that which remains stuck to the bedrock and barrigas, which the owners have no means of recovering that which remains in this way even when they work some barrigas that have much ore, with the platforms [barbacoas] and scaffolds they make. And also some of the rich [ore] is found in the current works in the main mines, but it is not of the purity, price, and esteem of that from the upper parts.

All which I say so that it be understood that the rich ore the Indians possess is not the cause of the decline in richness of that found in the current mine works, as that is not where the rich ore comes from, because it is clear that if the mines the owners are currently working had the rich ore that goes to the gato, as much as they might 'deflower' it, it would remain with purity that would conform to that ahead of it [i.e, superior to it]. And we see the contrary, because in almost all of the mines the ore does not reach two and a half pesos [per hundredweight], and the majority of it not even two, and there are many mines at a peso and a half and at ten tomines [i.e., a peso and a quarter], from which it follows that this damage does not result from the barter, because as great thieves as the Indians might be, the owners would have taken care and been diligent so as not to be so damned.

Among the Spaniards who barter there are some who live by regatones who barter for the 'coca ore' and common ore for reales, in order to turn it around and resell it in batches, a known gain and great risk for whoever buys it, as ordinarily they lose in it, because, as these people do this to turn it around for sale, they do not go with care and without the mixture of poor ores that if they were to refine it, buying it from good mines. And to sell it at advantage, they make from the best corpas some samples with which they ensnare those who buy. It has seemed that it would better if there were no regatones and that the gato be free of these people, and that only those who were going to need [ore] for refining, who are not few, be allowed to buy. And toward these [regatones] the mineros have the greatest hatred, seeing them with their storehouses full of ore they say is from

their mines. Others of the opinion that this must not be impeded, and rather that it is a useful thing that they assemble batches of ore (and I saw one the other day of more than 17,000 hundredweight in just one regatón) with which they supply the missing portions needed by the stamp-mills, and that there are many who are content to gain in the ore they refine the transport costs of their mills. But I take the former position as better, so that there not be so much scandal, and as by law and the peoples' custom the regatones are prohibited, because they make things more expensive, and these of Potosi do that, and it is in their interest to defraud those who trade with them, selling them 'cat for hare.'

I find it difficult to give a true account to Your Excellency of the ore that the Indians bring to sell in one year in the gato, because it is a chaotic business and at one time there comes more than at others, depending on the work going on inside the mountain. And when the most arrives is between San Juan and Christmas, which, for having stopped grinding the mills along this Ribera, they send the Indians to the mountain and all go to work the mines, even though this is prohibited according to the allotments made by the lord viceroys, (p.164) mandating that the Indians of the mills not be sent to the mines, nor those of the mines to the mills, due to the danger they may suffer for not being experienced in extracting ore. And thus they have procured to always send the Indians who have spent the most time in the mountain, and this royal audiencia revoked this [part of the decree] and gave license in order to send them to the mines, which seems a good order during the dry season in which those given for this cannot occupy themselves in anything else, as there is never a lack of continuous work in the mountain. And averaging the one with the other, it seems to me that there must be sold more than 200,000 hundredweight that comes out [per week? month?], the rich [ore] sold with the poor at two assayed pesos [per hundredweight]. And as for this quantity, it is best judged according to the barterers there are, who are many, and by what they buy. I know one who between San Juan and Christmas of [15]83 bartered 25,000 hundredweight of ore of all types, which cost him 81,000 pesos corrientes, and if it had rained that year he would have bought 50,000. And today there are refiners at 15,000, 20,000, and 28,000 [hundredweight bought per season]. There is transport in Tarapaya.

The ore of the gato would be of the purity, more or less, of five assayed pesos [per hundredweight], and His Majesty gains, in the fifths pertaining to this one trade alone, 200,000 pesos. And it would incorrect to say that, lacking the barter, these fifths would not cease, with the mine owners refining them [the ores]. This claim in unsatisfying for that has been referred to and alleged. The remainder of that which is refined from the mines would be 600,000 hundredweight, and a million are needed to run at full capacity all the mills this province has, which is the quantity they can mill in a year. But there are few that mill all they are capable of, and there are many that have no more than the name [of mill], by which means they employ Indians, as Your Excellency will verify in the general audit.

It seemed to me useful to treat some notes, in the form of additions, on the paragraphs contained in the opinion of father Jose de Acosta, so that they remain more intelligible and that Your Excellency has news of everything, which is what I desire, and not to scribble curiosities by order of the pen [con orden de estilo].

As for the first paragraph, which says that the natives must be made to understand that although His Majesty grants them the privilege of selling and bartering ores, neither the law of God nor the law of the king gives license to steal ore, etc., in this square they have the custom on Fridays, as it is the day when most ore accumulates and on which there is the greatest concourse of Indians, there preaches to them a father of the Company of Jesus in their language how important it is to their salvation not to steal, and to see that God sends thieves to hell, the king punishes them, and other things in this vein.

As for the second, which says that the justices should take special care in inquiring after and punishing the Indians when they discover some notable theft of ore, letting the smaller ones go (which seems to be founded on the common saying that it is not a mortal sin to steal a small thing); but this has to be understood when it is not the cause of some great harm, as it could be in this case (from which there result many doubts [i.e., disagreements]), because if they were many those who steal, albeit only a little bit each one, together it would be a great quantity and with this they could destroy the mountain, as this would be a substantial theft, and the owners of the mines ruined, although to each one individually they took but little, and likewise that that which each took was small, but when taken together with that stolen by the rest it results in great damage as the quantity is large; because, although he does not do it he of that one time, as Dr Acosta does not want him punished nor made to make restitution to his master for having taken but little, he should make him do so for the previous ones, due to the continuous perseverance there is in that. And I think it must be based on an opinion received from all the authorities [sumistas], which says that if one is so poor as to not have a means of sustaining oneself and one's household and family sufficiently, and one cannot find sustenance through working, it is not a mortal sin to take what is necessary, not being much, as this never caused great harm, although the quantity of all those little thefts together is great. And thus if the needy is granted the rights to take advantage of that which is at hand, how much more justice these Indians must have, not being able to sustain themselves (p.165), as the day wage is small. This item, in accordance with natural law, could satisfy he who finds himself in such oppression, not only to maintain and dress oneself, and this we owe even to a slave (NOTE - SLAVEOWNER), but even to enrich oneself and take advantage, as we have done in their land. But these cases should not be understood thus with these people, as they are compelled with so much risk to their lives to work in the mines, and thus it would be better to take from this doubt and difficulty the fact that there are a great number of Indians who acquire it [ore] with just title, and that, in case there be something stolen, be it as it may, not for that should licit trade be suspended due to the part that may be badly acquired. Which is at the base of the [learned] opinions and in the will of the prince. And thus they open by approving the decree given on this.

With regard to the third, which says that there not be allowed any barter in ores by the Indians except in the gato or public square that is assigned for this purpose, under penalty of loss of ore, dividing it up among the judge, the denouncer, and the hospital, I say that it is not essential, nor would doing the contrary bring about the least inconvenience, and [if enforced] it would be of great damage and difficulty to him who had to receive the Indians regarding the denunciations that would follow, not being able to excuse them.

And as for this one must point out that toward the flank of Guaina Potosí, where all the most traveled roads that go up the mountain meet, in the township that is located on that side, there are many Indian women established there, who live in those parishes, with their coca and bread stalls for the aid of the Indian men who go up and down the mountain, the same which they barter and trade for bits of 'coca ore,' as no other kind of ore is sold in the township, the same which they go accumulating in their houses in order to turn it over to their masters, for whom they sell it or those who have the capital collect it to resell in a batch of 30 or 40 hundredweight, more or less.

And as for the fourth, which says that Spaniards should not be allowed to enter the gato to barter, but rather that they barter by way of their yanaconas, it is most just, due to the troubles and ill treatments the Indians receive when the Spaniards personally buy, as I have said before. Yet the same harm is done to the Indian who comes to buy it, for having someone to bid for it or to take so much for it, which is what is usually done; and other times, after having bought it, breaking the ore chunks [corpas] and if inside they are not as good as they appeared on the outside they return them, that not for the seller would want to have so many buyers, as it cost him so much to extract it, especially Spaniards, who do not take things as 'a little more or less' like the Indians, being phlegmatic and spending an hour haggling for it. And thus some guaira refiners have disagreements with the sellers, occupying themselves with this until their hour passes and everyone has freedom to buy, and they sell to whomever offers them the most, and not taking from them this aid. But it ought to be observed that which was ordered regarding this, as a thing that is best.

Resolution in the matter of the barter.

Beyond the reasons and arguments that have been given in order that the natives not be stopped from trading ore, there are others that are of no less persuasiveness and strength in order that they not be blocked from the aid they get from this path, as in a free republic, which in any other way it would not be, and without referring to this those of the learned opinions, which are most urgent, and for clear and vivid reasons they conclude that it is licit and that they be permitted, with [official] approval, the use of ores, taking note of matters of great significance and substance in order that one not deny these people whom we owe so much, the gain that with so much work and risk of their lives they have acquired with just title. And even if there are many who when the opportunity arises, and physical labor, and little pay, and being as they are wretched and of little understanding, they should steal a little ore, not for this should all be condemned. Especially as the discovered and given notice of all the veins and mines, and the Spaniards have usurped them and defrauded them in the registries they have made of them and in the audits, and at present they have many mines.

And it would benefit the service of His Majesty and the wellbeing and growth of this kingdom, that these wretches be well treated and enjoy the exemptions [or franchises, franquicias] that are conceded to all the other vassals, as His Majesty takes such special care in charging them [with duties] and in looking out for them, as something of so much

importance to his royal conscience. And because they have known the improvement they have now, they are given to search for mines of gold and silver, upon which depends the conservation of the kingdom, seeing that, as free persons, they are permitted to make themselves rich with them [the mines]. And we see by experience that each day they give notice of new discoveries.

And it would be possible that they may discover those [mines] that were hidden at the time when they were conquered, which are those where the Incas extracted such a sum of silver and gold as this land used to have, the same which have yet to be known, nor the lakes and places where they deposited and hid that which they had, plus that offered and dedicated for so many years to infinite huacas and idols that there were in this kingdom, especially in Uricancha, which was the temple of the sun, and now is the monastery of Santo Domingo in Cusco, about which it was discovered, the lord viceroy don Francisco [Toledo] being in that city, from elderly Indians, that it was infinite the treasure they had in worked gold and silver; and they never could find out what happened to this, because the memory has been slowly lost, and those who saw it hidden have died; and this they take for a very certain thing.

And a certain woman, playing on the greed for its discovery with don Sebastián de Larraún, bishop of that city, led him to understand that she knew where the great treasure of the Inca was hidden, and with the fame of these things it was easy to make him believe that which he wanted to, and it was said that he found great riches. And this business being thus and the talk it generated, that it moved the viceroy to send Licenciate Paredes to that city, oidor that he was during that time in the Audiencia of Lima, to ascertain these things. And it cost the bishop a trip to Lima to see the lord viceroy, from whom he heard very heartfelt words; and in the end it was a trick they had played on the bishop knowing his inclination. And it is understood that these unfortunates have many huacas, to which is offered much gold and silver, livestock and farm plots that they tend to support them. and they have their attendants [ministros]. And in this there is much secrecy, which it has not been possible to reveal, His Excellency attempting to discover it, carrying out many proceedings about this. And the best means that could be taken in order to figure out where all these things follow from, is to not deprive them of the ores, but rather to leave them, letting them know that should they discover them and make them known they will be able to enjoy them, as they are not slaves.

And in order for these [Indians] to possess and deal in the ore they are much aided by the proceedings done by the lord viceroy in this villa with the mine owners, having made to come the Indians who he brought together for the work of the mines, negotiating with their owners since it was already seen how these peoples had come from such distant lands, and that he wanted to give and leave them with them so that with this help they could be made rich by their labor and sweat, and it was those who had left their houses and lands to come to these strange ones who ought to have a reward equal to their labor and that they ought to have a means to make a gain and pay their tributes, and as it seemed to them that it would be just it was ordered that they be given it as their day wage.

The town responded that they were very content with that which His Excellency would order or mandate. The lord viceroy told them: 'It seems to me that you should give each day to the Indians who have to work in the mountain (which were the ones for whom this business was being done with much cunning and sagacity, for that which resulted from it) three pesos.' The villa, or the part in which the mine owners were found, replied that His Excellency look at this closely, as their estates were not worth so much, and that it would be better to give them this at once. The lord viceroy responded that it seemed to him that the just price would be two pesos, and in this manner he went on dealing with them until it was one peso, and that he would not make it less. The mine owners said that His Excellency should consider that the Indians would certainly take advantage of the ores of the mines, as they had always done, and that this could not be less. The lord viceroy, not wanting to hear another thing from them, told them: 'Well that is so then that the Indians have to have other gains beyond the day wage, I will define it in a way that suits you well.'

And thus went the deal by which the mine owners found it convenient for the Indians to deal in ores, and also the grace [i.e., leeway] given them for the adjustment of the day wage and pay as has been done up to there, (167) as at the time when the justice of this villa allotted the Indians to the mines, they were ordered to receive two tomines of current silver as their day wage, such that if they had no other earnings, it would be impossible for them to sustain themselves, and it is a proven thing that they let them take ore.

Some want to say that the mine owners did not say those words in this way, but rather to point out to the lord viceroy the small day wage that up to this time they had had, and fearing that he would make them satisfy the Indians, they told him: 'The mine owners have always had the custom of permitting the Indians who work in the mountain to take advantage of the ores,' but not because it was their intention to grant them these afterwards, although the lord viceroy received the words in the first sense.

And one also has to consider that all the mineral deposits, being as they are of the crown and royal patrimony, those who possess them have nothing more than the usufruct that is conceded to them to enrich themselves and do them a favor. And thus we see by decrees issued in conformity with the royal laws that one who does not work a mine that one possesses loses the right he has to it, and he who follows in it is the one who peoples it and works it, although this might have cost the dispossessed great sums of money. And we know that there are many among those who condemn this trade [by Indians in ores] who have acquired many mines as abandoned, taking possession of them, and this is the right they have to say that they are being robbed of their estates; and the natives do not ordinarily make use of this remedy, as only a few are worked by some, as, well, their owners do not do it.

It will ultimately happen to Your Excellency, that the miners shall plead that the barter be suspended and stopped. Your Excellency should look at it as the very important thing it is, and with the supposition that without this gift and aid to allure and give hope to the Indians here, that it would be most difficult to detain them, because all would leave

desperate, with no means of remedy, if not with great outpouring and violence by these people; and His Majesty would not permit this, as one of the items of instruction brought by the lord viceroy don Francisco was to populate this villa (for having written to His Majesty of the many people lacking due to the little prospect they had), it was ordered that he do it by good means, raising the day wage, in such a way that the Indians would come of their own will, without the least force. And being in agreement as to governance in the city of La Plata with president and judges, His Excellency said, arriving at this item, speaking of the Indians he had mandated to come for the mercury refining, 'Order me Your Majesty if I should do this, and send me the means, and these cannot be such that they have no violence; and it has been necessary in order to put it into effect that I be here personally.' And it is said that the Royal Council of the Indies never responded to the lord viceroy on this matter, a thing that may lead one to believe that it seemed well to them to bring so many people to this villa against their will.

And I do not know if it is justice to put that which these people have each day in opinions, as in dubious things one has to judge in favor of the weakest part, and following from that there should be an authentic determination that it is the will of the prince, and the resolution of the lettered men who approve it, and it is not good to walk from prophet to prophet so as not to stumble upon someone who misleads us.

On the sales of Indians they make in Potosí.

His Majesty, as a most Christian prince, has taken special care in sending for his government and good order, conservation and augmentation of the natives, very just laws aimed at their succor, defense, and good treatment, so that, as free vassals, they enjoy the liberties permitted to all others; and if there is some defect or inconvenience in the execution of that which is charged with so much, it would be in the laxness and carelessness that His Majesty's ministers might have in not taking the care that is convenient and necessary so that they not receive harm nor vexation, these people from whom we receive so many benefits.

And one of the greatest forms of slavery suffered by those of this villa (and that matters a great deal to the authority and reputation of Your Excellency to remedy that which without him there has been, by stopping the sales they make of Indians and removing them (p.168) from this subjection and servitude), is that they make of them and their labor and blood, a trade and commerce, as if for gold, silver, and pearls, or other saleable merchandise in which men trade and found their private gains. For these Indians they give in exchange, he who has a hand in them, taking into account the time for which they are requested, reducing, commonly, the value and esteem of twelve Indians with respect given for a year, in 1,000 pesos assayed silver in which they sell them, and many times they pay them by account or they charge them for their thirds (tributes?), the seller remaining free to attach them to another once the term is up because he sold them and transferred them, as if they were infidels, and although selling them is prohibited, treating as a land of conquest one that they gave His Majesty in peace, and discovering another Guinea trade, and more profitable, because there they do not sell the slave more than

once, the owner remaining attached to him forever, and here he who is free is sold by many and each Indian goes sold for more than 80 assayed pesos.

The origin of this pernicious custom and tyranny, which has no other name, has come about from giving them to persons who have no need for them since they have no capital works [haciendas] in which to occupy them, which is what they were meant and designated for; or they are those who have a few virgin mines, winning donations of them; or, when they audit the mountain, they make out like they are discoverers of little veins, which neither this one nor that one is of the least value, so that with these titles they manage to plead with the lord viceroys to make them grants in giving them Indians as if to persons who have capital works, or they distribute them according to the general allotment.

And in order to disguise these sales some palliate them under color of companies formed with the mine owner, who sets it up (along with what is necessary) in order to remove the ore at its [i.e., the company's] cost, and later they divide it, reducing to silver the part that they falsely claimed would go to him who put in the Indians, or taking them in specie. Others place them in the mills on barter for milling and refining; and others because they bring down ore from the mountain. And finally, the poverty of the Indian is a coin with which one finds all that is necessary, as with gold and silver, and much better.

There follow from this many inconveniences, aside from depriving them of their liberty and lordship and of wanting loafers (?) to take advantage of their sweat, and the government to give opportunity to sin by misusing them, such that, as they go to the buyers at eight reales' day wage per Indian, with the two reales and three quarters they pay the Indian for his work, the seller gaining a surplus of more than five reales, making them work more than they can and beyond their strength, assigning them tasks that are prohibited, which is no small injustice, for remitting something from the excessive day wage; and with little provocation they lose patience and mistreat them, quarreling over who is allowed and who justifies using such force as these or those suffer. And commonly those who sell them are lost people and vagabonds, who serve only to burden the republic and go about gambling, sometimes even [wagering] the Indians they are given.

And the quarrel that the owners of refineries have is so great that they plead with God for justice in this abuse, because they are so poor that they cannot pay the ordinary day wage, and how much more being so rigorous with necessity constraining them to these purchases, leaving them after refining without the least gain. And this is not better for the Indians but rather against their interests, as it is unjust that anyone hold them in such vassalage and fiefdom. And thus it is a great crime the sale of them, nor should anyone be given a means to do this, nor should it be permitted. And the caciques and captains seeing the dissolution that has resulted from these sales, they also take advantage of this means of stealing the sweat of their subjects.

And the lord viceroy don Francisco de Toledo was so zealous that there be nothing to lead to the sale of Indians, so much so that to remedy this he banned the sale of mines and

refineries along with them, taking from them [the owners] dominion and lordship so that the same capital works would be passed on with them to another holder, by taking away this opportunity, knowing that in this way they would have greater value. And if they sold them, the Indians would be removed [from the contract]. And therefore it was decided that one had to petition for a license for this effect, virtue, and capital; and His Excellency, being a person of whom good treatment of the Indians was hoped for, made the decision so that they were had by his hand and none could possess them against the will of the prince.

(p.169) And in the list of privileges requested by the mercury factors, of which the last renter was Juan de Pendones, they placed on this villa a chapter and condition in which they requested and pleaded with His Excellency to assign them 150 'cédula' Indians for the staffing of the mercury pack trains, mines, and refineries they had, and all of it was in the service of His Majesty and for the gain of his royal treasury. [And the viceroy] mandated it be taken away, and he wrote Corregidor Loyola, who was to send that concession to His Majesty and the Royal Indies Council, and that for the Council it was best not to be engaged in the business of allotting cédula Indians, and that they not allow anyone to intervene and trade them for the value of their allotment, and that they would have to keep account of giving them out, and could only do so in written form.

And thus Your Excellency would not be served to give out these people as vassals if not by way of the allotments, and to occupy them in the work for which Your Majesty granted them, without giving dominion over them so that they could be sold. Nor should your allotment and distribution be entrusted to any individual, due to the harm that will come to them [the Indians]. And the disorder there has been in this should be sufficient proof to punish those who have profited from this [selling] and making themselves rich from them [the Indians], ordering them to return and repay that which by this path they have taken away, restoring by this account in the strongbox so that these be converted back into [crown] benefits.

This royal audiencia has mandated that the person who sells Indians be stripped of them, and of the money given for them, and that the buyer pay a penalty of 100 assayed pesos. This has not seemed serve as a remedy, nor a means to find out the truth, not even about he who buys them, or their labor, pleading no fault, but rather claiming to meet his necessity, and thus it settles between both parties. It would be convenient to have a denouncer, ascertaining what motive he may have to accuse. But the most urgent remedy is to give them [Indians] to those who have the need and have the working capital.

I hope to God that this evil abuse and sale that some carry out under the title of favorites will be remedied by Your Excellency in such a way that the natives will know liberty and the good things that will follow for them with the good arrival of Your Excellency, freeing them from this oppression and annoyance and injury that is done to this nation. And His Majesty will be well served with the rectitude and reform that will there will be from here forward in this and in all that which needs to be remedied.

Of the parishes and doctrinas of this villa.

It was necessary for the good spiritual government of the Indians who reside here, so that with greater facility they could be taught the things of our holy Catholic faith, to add to the eight new churches constituted and founded by the lord don Francisco de Toledo upon the six there already were. And with this settlement being a mining site, minus the temples of the Spaniards (which are the main church, Our Lady of Mercy, St. Francis, St. Dominic, and the Company of the Name of Jesus, a temple just completed, most sumptuous, and St. Augustine, which was founded a year and a half ago) there are fourteen parishes, whose churches and chapels are: Our Lady of the Conception, St. Christopher, these two doctrinas having priests from the Order of Mercy; St. Francis and St. Peter, served by priests of St. Dominic; St. Paul, St. Sebastian, St. Augustine, St. Barbara, Our Lady of the Incarnation, St. Bernard, and St. Martin, which was the last one founded.

This is a chapel in which they say mass, without congregating 1,100 Indians of the province of Chucuito, which the lord viceroy don Francisco de Toledo ordered expanded, aside from so many others who had been here for some days. They are not congregated because there had been no one given care of it. They lived scattered among two or three doctrinas, without the priest being able to confess them or make them hear mass, as they are spread out among neighboring parishes, where it is also not possible to administer sacraments to them, as they know well what to look after with their parishioners, and as they are not written down, they cannot keep count of them, which is much desired as they are ill-inclined. The priest they now have does not see them but every eight days (and those being only the ones who want to congregate) nor does he know them. It would be convenient for Your Excellency to order them concentrated, as the site next to the town is good and spacious, where the road to Chuquisaca passes. There is much stone, which is a great help, and the well water is not deep, and that [the water] of Tiopampa is nearby.

At the time of the general reduction His Excellency ordered that a portion of the Indians' obligations be set aside, taking away a third of their tribute, both from those held by the crown and those of private persons, for six months, in which time the reduction ought to have been finished. And because this time was not sufficient, they were relieved of one half of their tributes and this was extended for a year; but they did not enjoy this benefit, because in the end they charged it of them, and it was handed on to the ministers of the general audit, and part was placed in the royal treasury, and that charged here was taken to Lima. By order of the lord viceroy 'reducers' were named at the cost of the villages; and this could be excused because there would be an administrator who would be present with them.

All the rest of the doctrinas have clerics, and after the reform that resulted from the general audit they have a stipend of 800 assayed pesos since the tithe is not paid, but once it is this will cease; and some prelates have tried to take away in silver that which is collected in surpluses of the kingdom, but they have not managed to do so. The priests were stripped of the camaricos [Quechua for gifts to priests and departing guests], which are rations and presents, plus the personal service they had (because almost everything the Indians gave them was in food and livestock, origin and base of their trade and

earnings, and opportunity to defraud them in the exchanges they made, occupying many Indians in their business and on farms they planted and from many gifts they provided them, and for their sustenance in the high desert [punas], where everything is scarce, and it cost them a lot to bring them from the lowlands and seacoast), stripping them of any kind of temporal jurisdiction; breaking the stocks and prisons they had for the Indians, with which they had them cowed and fearful and dependent on their will; and that they could not punish public sins, since for this His Excellency named the corregidores, freeing the Indians from great subjection, without finding the least concern for their salvation, as was seen from the investigations he personally carried out.

And because there was found some disorder in that the most beautiful young girls in the allotment, daughters of principal headmen, were serving them in their house and kitchen, doing so in a weekly mita, he ordered that they not do so from that day forward due to the scandal that would follow, and for having perverted this laudable precept. And for corroboration of this the royal audiencia [of Charcas] dispached a decree, which was personally taken around to each parish by don Francisco de Zárate, judge of the natives, and a cleric who was in one of them responded saying he would appeal, and later he was stripped of it [his parish].

The lord viceroy charged the corregidores with all that pertained to confiscations [temporalidades], satisfying the Indians, and that they alert their prelates to the correction of their indoctrinators when they might meddle in some thing that would harm the natives. The doctrinas of the province of Chucuito also pay 800 pesos, and all the rest in this bishopric are at 700 pesos; and those of the bishopric of Cusco are at 550 pesos, and some go below this; and those of the lowlands and province of Lima are at 500, and at 400.

And His Excellency ordered that any priest who did know know the the general tongue. which is what they call Quichua (so named for the main town where it was spoken and used by the Incas of Cusco, which was the head of the kingdom, as it still is, although it was not the original one the land had), be stripped of 100 pesos of his salary, to give them incentive to learn it, for having seen how remiss and careless they were in indoctrinating them due to this defect, in a thing that counted so much to their consciences. And it was a thing much to laud (loar) the government the Inca had – being taken from among the thatches, and lacking common law, and having no news of the ways and customs of other orderly nations – to give order such that their vassals learn the language of their court so as to better be able to understand and govern them, and between them there was greater amity and love for being able to communicate in one language, as they were such diverse nations and of such different languages, they brought them together as one so as to understand, sending back out those fringe-dwellers and 'native foreigners.' And this would seem to be more the providence of heaven than some idle curiosity, so that when they came to preach the Holy Gospel to these peoples, which would not have been enjoyed by the preachers of the first miracle and marvel, which was that only by learning one language which is so easy and clear, and can be written with our characters, they could preach the word of God among them.

But as the land is rich and its products many, they did not feel at all the hundred pesos, without attention to this day more than that one, confessing them according to a brief and succinct set of standard questions, without being able to confess matters requiring more response with regard to the number of sins, and preaching to them by way of a yanacona, who relayed to them what the padre told him, interpreting as best he could at times and at other times saying whatever he wanted. And His Majesty, with the most Christian zeal he has for the conversion of these natives, sent to this kingdom in past years a decree, in which, as universal patron, he ordered that the doctrinas that were vacated be given only to priests who knew the language [Quechua] and were also living right and of good reputation, and that in each bishopric there be a hall [cátedra] where it would be taught. And in conformity with this decree, when in this bishopric a doctrina is vacated, an edict is placed on the door of the church that says this, and later candidates are proposed and then they face off, and the lord bishop names two priests who before all else have to have exhibited the approbation of the professor who is most fluent and expert in the language so as to administer the sacraments to them and to preach to them; and these two priests present the prelate to the governor, who chooses from these two the one most seeming to him and the one he most wants to give the grant [merced], because both are presupposed to be sufficient to some degree. This decree states that all priests that should have doctrinas must produce, within a year of its publication, the same proof by their professor, and if the term passed their doctrinas would be declared vacant.

The lord president had this read in the Jesuit college; its professor is father Alonso de Bárzana, of the said Company of Jesus, lettered man and servant of God and great preacher, and who has had particular personal grace in the conversion of these people for knowing the Quichua language and Aymará, which is also quite common in the districts of Cusco, Arequipa, Collao, and Charcas. And it was a very proper and convenient thing that the president did in placing this school in this college, due to the care that those of this order have taken in learning these languages and making use of them before now, with great effect among the natives. And it is also proper because if it were placed in some other estate, there is a good chance that the proofs would not be given with the same freedom as they are now, by Father Bárzana, to those who truly deserve them, and if this were not in the hands of someone of such reformed life, it would be a position much disposed for making great bribes. And this place is more comfortable for reading it [Quechua] than the city of La Plata, as there reside here many clerics who host those who hear [confessions] in the doctrinas. There was assigned for this teaching a stipend of 1,000 assayed pesos.

And His Majesty has issued lately a decree, given on 26 October of [15]83, in which he speaks of the prelates of this kingdom saying that the reason for having assigned members of the regular orders to the doctrina rectories and native curates had come from the lack of secular clerics of the order of St. Peter, to whom pertain, by ancient right of the Catholic Church, the administration of the holy sacraments, charging them from this point on to occupy vacant doctrinas, the seculars being preferred over the regulars, with the rest distributed among the orders.

This decree was put in effect by the ordinary with more rigor than it says, giving space to vacate doctrinas, and the clergy began despoiling the friars of those [doctrinas] they had, putting secular clerics in their place; which they felt more than a little, due to the shelter the monasteries have and for being the first to extirpate the idolatry of these nations. They turned about to seek restitution all the way to the decision of the cause.

The main church of this villa is well served and with rich ornaments, and likewise all the rest of the churches and doctrinas; and this past year it was finished, and it is a good building, and (172) the priest it has just recently came from Castile, selected by His Majesty; and the vicariate is used by the lord bishop as ecclesiastical audiencia, where there is no lack of business.

There is a hospital they call San Bartolomé, where they ordinarily cure many sick persons, Spaniards as well as Indians. Its rents, at base, are 14,000 pesos corrientes, and with alms it is 20,000; and 10,000 are spent on the salaries of the ministers and the sustenance of their persons, minus that spent in the pharmacy and on the sick, which is a lot, as just the well consume half.

Of the Province of Chucuito and of the administrator who resides in this villa for the collection of tributes.

This province is a native town with the title of city, which has six main villages of the Lupaca nation in El Collao subject to it. It is situated on the royal road that goes from this villa to Cusco alongside the great lake of Titicaca, which has a circumference of more than 80 leagues, and a depth of 75 or 80 fathoms, into which empty substantial rivers, and it has for drainage a large river that empties into another lake, through which it sends its waters underground to the Southern Sea, and this one looks like it for its greatness. It is abundant in fish and along its shores there are these villages that pertain to the royal crown. And the lords viceroys, predecessors of Your Excellency, provided for their governance a corregidor, and not many years back His Majesty has made it a governorship and has provided it with governors. It is an office of importance and of many gains as the province and its inhabitants are rich, and it is near the coast and the valleys of Arequipa, and is most abundant in llamas and alpacas [ganado de la tierra], and much clothing, and along the main path for the whole kingdom; they do not grow there anything more than potatoes from which they make chuño, which is their main sustenance, plus quinua.

From the beginning of the conversion of this nation, the first to preach to them were the priests of the order of St. Dominic, the same which built sumptuous houses and monasteries, which would be good even in Spain, and on this point His Majesty has ordered that when an Indian church is founded and built, it must be a humble structure and without opulence [grandeza], so as not to weary them with the excessive works. It happened that in the time when the lord viceroy don Francisco de Toledo came to audit this province, for reasons that moved him he stripped these padres of their doctrinas, and [now] one of them is held by those of the Company of Jesus, and the rest, clerics with their vicariate.

I have already said that from this province there reside in this villa 2,200 tributary Indians, the same which barter for their mitas like the others. And the lord viceroy don Martin Enriquez, for the governance and administration of these Indians, named and placed a receiver and administrator with staff of justice, so as to charge them the 35,200 assayed pesos they are obligated to give His Majesty in silver, because the cloth they render is paid to the royal officials without being in the charge of the administrator. For collecting this silver there is a strongbox with three keys, which is kept with the other royal strongboxes in the quinto; one of them is held by His Majesty's treasurer, the other by the administrator, and the third, the captain of the province.

The main body of the tribute is charged of the 2,000 Indians, and the remaining 200 come so that with them they may fulfill the remainders and shortcomings that may result from charging the 2,000, charging from these ones and those ones their tribute and if some should exceed, it is kept in the strongboxes for [later] shortcomings. By separate account the said administrator charges each month from each Indian the peso and a half that they have to pay, in accordance with the eighteen they have in tribute, with the attendance of the captain and principal headmen, and that later, on the day after the collection, they place them in the strongbox, putting it all down in the book that is kept for this purpose before the scribe named by His Excellency. And every six months, at St. John's and Nativity, he is obliged to hand in the silver that was thus collected to the royal officials; and if there remain some Indians in this province, the eighteen pesos are charged of them plus the three pesos tribute they have in their villages, and this is placed in the strongbox for the said remainders.

There are occupied in the administration and good government of these Indians a receiver, who is given a salary of 1,200 assayed pesos, and fifteen principal headmen at 40 pesos each, and six bailiffs at 20; and this they have to charge by dipping into the tribute in the strongbox because, to do otherwise, among them all they would not be able to take more than half their salaries. And this ought to be from the gain made from bars to reales, because the Indian complies by handing in and paying the tribute in assayed silver. And because they go charging it from them each month, and in reales, it is ordered that with them they buy bars, in which one usually gains two and a half pesos per 100 in exchange. Three or four years ago they made eight, and from this gain the other earnings that resulted from the 200 Indians, they could pay the said salaries, although it is true that at the time when the silver is dispatched for the fleets the bars are worth more than reales, and it is common to pay a premium for them.

The scribe for the accounts of this strongbox, who is Felipe de León, has 300 assayed pesos in salary and is one of the public ones [i.e., notaries], of the four that there are in this villa, with so much business going on, both criminal and civil, that day and night they have to deal with the frauds of this town. These people from the province have always served badly those persons to whom they have been allotted, because they run off and always come up short, as their land is rich and produces much livestock and other means to gain, and with the care placed in this by the lord viceroy don Martin Enriquez and he who he has as administrator, it is being amended and done better.

Of the mingado Indians and of the disorder there is with them.

The need the householders of this villa have of Indians for the staffing of their operations [is great], as the number of those allotted is not sufficient due to the many mines there are, and the mills they have gone on building each day (against that which has been ordered in this regard, in which it has been prohibited to construct more mills, with the warning that they will not give Indians for them, and despite this they have not ceased to carry on, confident that when they are audited care will not be taken to keep them separate, like bastard children for whom it is not right to enter along with the legitimate ones, for whom it was adjudicated to receive a third of the Indians), and as they have made so many – and many that have no more than the name so that with this they can defraud the old ones – both these and the others remain in need. And in case it should be judged right to allot them Indians, they ought to be given some from the 'uncertain' ones, and those not present here, so that they would take care to solicit their coming. And if this is not corrected and reformed, likewise in the growing demands from the many other milling machines that are impertinent, each day the necessity will grow.

And as for what is now done, they are forced to hire many Indians, who from the 'reserved' part have this means of gain, some putting themselves in some small plazas where those who need them will seek them out, which is to say everyone, because in each mill they lack at least as many as they already have. Each day they give them 4 reales and one cuartillo, and some add to this coca so as to be more certain of them and so that they will work with greater will in the refining, because for milling one cannot find anyone, as it is the most laborious thing done by those ordered by decree [los de cédula].

The mingados have customs such that, before going where they are called, they receive the silver, no matter how creditworthy or well known is he who takes them, nor how well he treats them so that they continue all week, such that they will not do it even when paid on account, offered to them in good faith, as they are so quarrelsome over that which they have in their hand. The same which they do, not having obligation and care to return the next day in the morning at the hour to start running the mill, and having the freedom to hire themselves out at midday to a new master who does not scold them for not having come at work time, from which follow many inconveniences, aside from the injustice of them running off with the whole day wage. And on top of coming in at ten they leave at four, and many times, having the money in their power, they enter through one door and exit through another without the least shame. And that which they do is with such sloth and carelessness that they leave the ore in the vats without completely stirring it (174), a thing causing great damage and loss because the ore that, arriving by order for stirring and heating, they wash and have ready in six days, which is standard, and as a result of these shortcomings they go interpolating, in a way that with nine or ten stirrings and heatings it is not ready, as the heat runs out and it goes back to where it started, and more mercury is lost and less silver comes out, and the cost comes out double and above all the time is lost and one cannot comply with the transport costs with the refiners because there comes to be a lack of water along this creek. And there occur many thefts, as the silver moves among so many Indians without an overseer, and in everything there is much

carelessness, because as they do not intend to return the next day it does not bother them to leave something lacking or badly done.

And thus it goes on this chaos and disorder, due to the malice of these people who have no more virtue than this and seem to be from some other nation, such that those who have been corrected, being 'by decree,' become evil and perverse when they hire themselves out.

Those who hire themselves out [se mingan] for the labor of the mines do not come to these places [i.e., the refineries], because in their houses and townships they contract with their counterparts, who give them four reales plus the right to a share of ore, although the mine owners say they do not contract for this expressly, nor is it their intention to give it to them, but rather that it is theft that they do surreptitiously for having need of it; and just because the mine owner says he did not intend it, this does not keep the Indian from acquiring it with just title, as consent is given. And however one may wish it, if this were lacking they would not go to the mines; because it is clear that to have someone work in a kitchen one would get four reales plus food, so it would be foolish not to offer more to go where gaining a bonus involves so much work and risk. And this is sufficient conclusion to justify the business of barter, and one may respond to what the mine owners say: that because they lack the Indians they need, they are forced to hire them, which leads to them being robbed. And I do not find a compelling reason to give them to them, and there are many reasons not to, and when there might be a sufficient number it would not be just to subject them to this servitude, as I have said before. And they will allege that they had all the Indians by allotment and set day wage, and that the day wage the Indians were to possess was stolen; and when there might be sufficient quantity so that they might give them all that were needed, it would not be convenient to do so for this reason. And in the case of declaring illicit the barter of ore, the only remedy would be to order that for their conservation all the Indians come down from the mountain by decree, obligating that part that would be allotted to the mines to go on Mondays to the plaza where they would hire themselves to those who need them, one has to believe that they would go with whoever offered them the largest share, and in this way they would have ores again, having put an end to this other way. And they say they are not lords of their own mines, but it is just that the Indians be such of their own liberty without having obligation to purchase it through the day wage. Returning to the mingas, it would be convenient to give an order such that they simply pay that which they agree with them to pay by contract, taking care that they work like those ordered by decree, as ordered by the lord don Francisco that they commence work an hour and a half after sunrise, and they be given an hour at midday to eat.

With those they suffer a lot, and they are the reason that they sell their labor, as the decree workers see how badly they are done by the day wage. And this is greater than the usual real and a half, so it would be a just thing and good policy that they have obligation to work like the rest and continue throughout the week, without the masters and overseers of the mills losing so much time in going out to look for them every day, which is intolerable work, and they do not always have the reales for it and could comply by paying them on Saturday.

There is another kind of mingado Indians, who are those rented by caciques in order to fill their required allotments, due to the shortages they have of them for many reasons, as much for the new distributions that have been done as for those given to private persons who have begged for them, very much against their will and at their limits, which is no small charge. And to these they pay three pesos for each week that they go to work, although they do have feast days; and this is charged of the Spaniard, aside from the three pesos, the usual day wage, a vexation worthy of being remedied due to that which the caciques and headmen suffer in the hiring out of these Indians by having the charge of the first obligation without adding another, and they could also do it for not having in the villa the Indians who ought to reside here, for not having anyone to take care that they swap their mita assignments, which is a very necessary and important thing. And some Indians make use of this manner of self hire when for some indisposition or other reason or occupation they do not wish to go and serve and do their mita, giving from their household fund the three pesos to him who offers to go in his place, the same which enjoys his day wage as well. Whoever might wish to discuss and consider these things, and the little or no obligation these Indians have to do this comply with us, would not consider it a marvel although they would see some excesses.

Of the abuse of coca and the damages it causes for the Indians.

One of the things that has been in need of remedy and has been of great importance to our reputation and Christianity of our nation to carry it out, as it is governed by such holy laws, is the extirpation and use of coca, as it is an abuse the Indians have of it, born of the error of their vanities and ignorance, nor does it have more basis than an ancient custom of this superstitious vice. And thus it has seemed to many spiritual persons that it would be right to end it, should our interest give occasion to such a just thing.

Coca is the leaf of some little trees they grow in the Andes, which are twenty leagues from the city of Cusco, in rainy and humid land and with great hills covered with forest, where there live diverse animals, as in Africa, and it is as hot as the Isthmus of Panama [Tierra Firme]. These trees, which are of the height of one stature or less, are stripped of their leaves four times in fourteen months, because every three and a half months they leaf out and beautify themselves again, with no other fruit than the seed with which they are planted. They are cared for by Indians, in which a great number are occupied. It is a most lucrative trade, and necessary for the commerce of the kingdom due to the profit that proceeds from it, serving no other thing than that the Indians spend whatever they acquire on it, without being an edible thing nor does it pass beyond the teeth. And such is their affinity for it that if they lack it, they say it will be impossible to make use of their services. Here they spend, those of this province, at least a million pesos corrientes each year, and with this one can understand how much is spent on coca compared to all the rest, because as the Indians buy it retail, it costs them and they go for, each basket, which holds eighteen pounds of leaf, at ten pesos corrientes; and when it is scares it tends to go for 10 or 15 assayed pesos, and at no price would they cease to buy it. And if such an exorbitant and excessive expenditure is licit, I do not know upon what is founded the laws that command that the villages not consume expensive and costly victuals (as they

do not spend their capital on them) if in a thing that we clearly know is not a victual, we permit that it costs these poor folk whatever they have.

The lord don Francisco de Toledo, having seen the vanity there was in this, and that the Indians were poor as a result of these causes, and it being a perpetual expenditure they have with these dry and insubstantial leaves, and that they figure in their sacrifices and idolatries and that today they are offered to the devil, and that their production costs infinite lives, as the land [where coca is grown] is of a different temperament and sickens the Indians with an incurable disease they call the 'mal de los Andes,' which is worse than plague [bubas] and of that species of humor, consuming them in such a way that they are left with nothing more than bones, and skin covered with sores, from which they come to die. And it seeming to His Excellency that it would serve toward the discharge of the royal conscience and wellbeing of the natives to eliminate the coca plantings, both those of the Andes of Cusco as well as those [Andes, or rain forests] pertaining to the cities of La Paz, Huamanga, Chuquisaca, and in the plains, undertaking many investigations in Cusco about it, such that the householders of that city came out, as they were profiting from this trade, and the prelates said they were dependent on what came to them from the tithes on it, and because it is wise when such a grave business proves difficult and arduous to seek counsel and to find a resolution for it, they called together the lettered men and qualified persons of that city. And these gave an opinion with a certain (176) restraint, which was the old style of speaking to the lord viceroys, saying that although it was just to eliminate coca, or at least to issue an order that the plantings of it not be expanded, and that if it started to diminish, such that little by little they would start to feel the shortage they might have to produce this 'aid' [socorro], which was a lot, it would be right to conserve it as there were more than 400 men of that city occupied in this business, and that the householders could not sustain themselves on the apparatus they had, as the Indian tributes were not sufficient to cover that which they spent; and that in Collao another 300 men were occupied in bartering llamas, on which coca is transported, and the Indians had means by way of their livestock to pay their tribute; and that in this villa [Potosi] there were another 400 men who dealt in it, and lacking this trade they would be idle and lost; and that these two things [idleness and perdition] had been the cause of past disturbances and that it was a most important thing for the general good, and that there would be no more Potosi once the coca ran out.

And so great was the hatred that everyone had for the proceedings they did that they announced on the street corners that it was not enough that the lord viceroy had come to conduct a general audit of all the estates, but that he intended to strip the Church of its goods, and that God would be pleased if, now that the trees lacked fruit due to the sterility of the land he should at least give value to the leaves so that with them his ministers might be sustained, should he want them taken away.

And about this he wrote to His Majesty, sending along that which he had written touching on this matter. And the Royal Council of the Indies sent a decree in which they were suspended in the business, making it known by letters of things that moved them to overlook that which had been done up to that time by their predecessors, being of a contrary opinion, as it was said when they wanted to write up the regulations, that they

not consider thanking him but rather his Majesty, the same which he did with the greatest justification that was possible. And I understand that they have not followed this with regard to plantings, and as for the tributes it seems they have ordered that some Indians pay theirs in coca, in land where the Indians have plantings of their own and are not sickening like those of Cusco.

Of the Royal Treasury and general commerce of this villa and kingdom.

In the course of this report I have treated on how important the richness of this villa and mountain is for the conservation and augmentation of this kingdom. And although this is clear enough to understand, there really is nothing that matters more than its ores, which I wanted to point out specifically to Your Excellency, because with this notebook one can understand what Potosí is, and its harmony, as its greatness and quality could not exceed the amount of its profitability, as much as His Majesty has of it as with that generally for all. And from this was born the care that Your Excellency would have for it, finding it thankful and responding to the gift and benefit is given to it, as it is the fountain from which flows and proceeds the silver and the guarantor who backs and supports those of Peru to send in trust from Castile such great fleets loaded with merchandise.

On this account Your Excellency must look at what past richness there was, and how it came little by little to lose its prosperity and to come to the misery and calamity it did, and how, by means of mercury, even as it was entirely playing out, it turned around again to get well and restore itself with great effort, and now [seeing] the state it is in, and the value of the royal fifths, and the consumption and expenditure on merchandise and coca, and that which one can infer is that which is to come, and rightly so that it should pertain to royal officials, and I owe it in order to comply with the title I gave of 'relación general,' which I believe it has been on the outer and public side; the interior and secret, touching on government, will come out in the audit, if it does not suffer some detriment, from which they would advise Your Excellency, the procurators of this villa, relating in live words the many things one cannot do so well in written form, especially if they are odious. And this will be enough, and true, inasmuch as it is necessary in order that what is ordered be done with the proper rectitude and discretion.

Under the title of Royal Treasury as understood in this new land are the royal perquisites [derechos reales], which properly are dues and tributes, plus the rents of the designated ports, along with what pertains of the fifths. In this there is in Spain some distinction, for the services, and foreign exchange, and St. Martin's day tax [martiniega], and the petitions, which cease here since the land is privileged. And thus I write only of this royal strongbox, and of the fifths that enter it in silver, and of the tributes that are charged here with the allotments placed in the Royal Crown and those consigned to the gentiles hombres, lances, and harquebuses, and whatever the mercury is worth, and finally that which pertains to the royal treasury.

And so as to understand the story of the mountain and its changes, I place here the quintos from the first years of its discovery and settlement, when it was governed by the lord licenciate Polo Ondegardo, father-in-law of the very illustrious lord don Pedro de

Córdoba Mesía, and who for his many services, nobility, and valor of his person deserved, after having served His Majesty in the Battle of Jaquijaguana and defeat of Gonzalo Pizarro and his henchmen, to govern these provinces and be twice the corregidor of Cusco, in whose house were kept the royal strongboxes, in which each Saturday they deposited the fifths on between 150,000 and 200,000 pesos, and the fifths were worth 30,000 or 40,000 pesos, and each year more than a 1,400,000 pesos. And this wealth began to diminish and waste away to such an extreme that what the quintos used to be in one month was all they came to be in a year, declining more each day. And after refining by mercury amalgamation began, which started to yield fruit in the year [15]74, they turned around and began to increase little by little, such that they began to expand the refineries and build the stamp mills, as Your Excellency will see from this table, which is of the quintos there have been from the year 1570 until [15]80:

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1570 177,275 pesos
     167,864 pesos
1571
1572
     129,532 pesos
1573 105,926 pesos
1574 193,786 pesos
     256,732 pesos
1575
1576 336,144 pesos
1577 475,483 pesos
1578
     530,021 pesos
1579 688,164 pesos
1580 749,516 pesos
     802,923 pesos
1581
1582
     860,729 pesos
1583
      768,599 pesos
      764,143 pesos
1584
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The quintos were much diminished in the last two years because there was a great shortage of water, and as a result the mills along the riverbank have milled little; and as this [year] of [15]85 has been wet, the quintos from the first of January to San Juan [24 June] have amounted to 516,803 pesos, and I understand they will reach a million, because although the milling season of this villa is past, there remain many floured ores to refine (due to not having Indians to attend to it all and for the great lack of mercury there was and is today) plus that which will proceed from what is milled in Tarapaya and in some horse-powered mills.

The fifths of mercury follow from how the work is going in the mines of Huancavelica, where it seems they extract from one year to the next 8,500 to 9,000 quintals, at least. These three years of the rental contract of Juan de Pendones, which began running in [15]80 until [15]83, they have turned in with the mercury of the fifths, 28,029 quintals, from which has issued each year 9,342 quintals, which have been worth to His Majesty in dues, at 30 pesos per quintal that are charged in this treasury, 280,270 pesos, minus the mercury that has accumulated by having been submitted each year by the factors as quintos charged in Huancavelica, which they are obliged to pay in Lima at 42 pesos, like

the mercury produced by private persons; and that which was submitted on the fifths account has amounted to 238,000 pesos, which for each year of the triennium amount to a bit less than 80,000 pesos, resulting from 1,888 quintals, which is what the fifths for one year have amounted to.

And all this silver from the fifths is today owed by the factors, and Your Excellency may believe that if Juan de Pendones were not in this rental contract it would not be worth much (178) since mercury has climbed to 72 pesos [per quintal], and everything would be lost and the householders of this villa would simply be the guarantors of this contract, and it would not be possible for one to come out of this contract well if it had not been held by him [Pendones], as his friends and the large size of his estate have been enough to keep the royal treasury on sound footing, and every concession Your Excellency may grant him will turn out well in his hands due to his experience and virtue and for that which in this matter he has served His Majesty.

The mercury account is not entirely clear in the royal account books, as the officials here do not have means of collecting the 30 pesos per quintal that pertain to His Majesty of the mercury that enters this warehouse, as no order has been given that is sufficient to eliminate the malice there may be on the part of the factors in paying it; and each year the amount due to the royal treasury from mercury is more than 360,000 pesos. His Majesty has, from 13 allotments set aside for the royal crown that are charged by this treasury, 143,003 pesos, not counting the cloth from the province of Chucuito, which amount to 7,823 pieces, plus the 1,500 baskets of coca from Pocona, and the 600 bushels [fanegas] of maize from Zipizipi, and that charged in tribute from the yanaconas; with these portions amounting to a little more than 500,000 pesos, which depends on the weather, as prices are variable. Whoever collects the cloth earns a lot by it.

They also charge in this treasury, from nine allotments consigned to pay for the lancers, 25,386 pesos. His Majesty also has gains from the mint, in which they work and strike [coins] in five cutting houses [hornazas], which from one year to another is more than 150,000 marks. And for each one there pertains for seigniorage one real, which adds up to some 12,000 assayed pesos, and it is the job of the royal officials to collect it from the mint's treasurer. His majesty also receives the third part from those things condemned to the chamber, which is worth from one year to the next 5,000 or 6,000 pesos, and in [15]84 they amounted to 5,617 assayed pesos, due to the large number of gamblers and people living in concubinage, from which issue many scandals due to the constant litigation and deaths that occur each day. And from miscellaneous receipts in silver, both of things lagging or outstanding that they go charging, as with offices when they are sold, there is a value of 15,000 or 20,000 pesos, and the same year [1584] they amounted to 29,429 pesos. And in the accounts taken in Chuquisaca from the year [15]79 to [15]83, they found in the strongbox, in extra silver received, more than 19,000 assayed pesos, which would be about 6,000 a year.

There is a standing order that each year that [accounts] be given to a judge of the audiencia who normally comes to this villa to take them, but as there has been a lack [of oidores] and a copy of them [the accounts], they have been far behind. There is a rule that

when there come to be 50,000 pesos in the strongbox that they be dispatched to the port of Arica so that they may be re-collected in Lima for the dispatch of the fleet.

And so the value of what His Majesty receives in this strongbox each year, pertaining to the royal treasury, amounts to 1,391,600 assayed pesos, minus the 25,000-odd for the lancers, and leaving aside 800,000 in fifths, and in this it would short rather than long, as we hope that those of this year will reach a million, and with the new order of Your Excellency such will there be every year.

There is in this royal building the smeltery, with five bellows, where they smelt the silver that comes in for the fifths, and they make the bars, which are some 12,000 or 13,000; and in the past year of [15]84, for which accounts were finalized, there were 11,209 bars of silver refined with mercury, plus 1,039 disks from the wind-ovens [tejos de guaira], which were worth 299,178 pesos. And from this one may understand the shortage of ore there is for the guairas, as the year in which the fifths were least valuable was [15]73, and they brought in to pay the fifth more than 530,000 pesos, not counting so many more that were consumed and circulated as silver currency as there were no reales; and now the fifths on guaira [ores] is 63,000 or 64,000 pesos; and in truth a third of this was lead. I also believe that this lack of ore comes from the fact that back then they put all the ore in the guairas and now many refine it all with mercury, however rich it may be, because during the time I have been discussing the number of Indians selling it [ore] has never been so great as now, although then there were more who bartered in it.

The bartering of these disks is very profitable, as more than ten percent can be gained as they change hands, and with little capital, in buying silver with silver. In the time of captain Martin Garcia de Loyola it was ordered that the assayer inspect them and assay them by sight, as it was a lot of work to have to do it by sample and for the cost that would go up for the Indians, and that he should put a stamp showing how many reales these were per peso, as they were of different fineness. And this order has been perverted, and I understand that it is not necessary, as the Indian knows what he is selling. There are many people who deal in those [disks], and the Indian men go to whomever most wants to give them 'friendship' and with ease they lie down with whomever they wish [y acuden los indios a quien mas amistad quieren hacer y con facilidad se acuestan a donde los inclinan].

There is also another extremely rich commerce which is the trade in ingots [piñas], which would amount to more than 30,000; and 25[,000] we know they smelt, and the rest they take to make silverware and that which circulates around town, with which they purchase in the stores; and the greater part of it they barter, because the millers and refiners go trading for it with them in reales. And for this they have banks that have no other thing, where they go to sell them; one earns in every two ingots, from which they make one bar, from 64 to 65 marks. They also barter disks of silver amalgamated with mercury, especially when they encounter a shortage of reales and they tend to smelt the ingots, and it is a greater gain for whoever buys them, as they have none of the impurity found in the ingots or assayed and marked bars. They are bartered and are profitable depending on the season, as I said regarding the province of Chucuito.

Also huge is the trade in this villa of Castilian cloth, and it is so great that each year it amounts to more than 1,200,000 pesos that is consumed and enters by sea from the port of Arica as well as that which comes from Cusco, not counting some 500,000 pesos' worth of woolen stuff, baize, and grogram [cordellates] from Ouito, from Huánuco, and La Paz, and 100,000 pesos' worth of local cloth, and 25,000 in cloth from Tucumán, which is a lot of cotton linen [lienzo de algodon], carpets and ornamental cloths [reposteros], honey [or sugar syrup], wax, and Indian cloth. The iron they consume in the equipment of the mills adds up to more than 300,000 quintals; the wine of Ica, Camana, Arequipa, which are wines from the coast and its valleys, and that of Caracato, which is in the district of La Paz, it is great the quantity that enters, which must come to more than 15,000 jugs, which are sold for 8 ½ to 9 assayed pesos. From Castile there enter more than 8,000 jugs worth 15 or 16 assayed pesos each; the conserves and sugar consumed is tremendous. And finally this commerce makes it seem like a great city, and with all its wealth in silver this town site is quite something to see, and yet on the other side it is also something to consider that the first thing the procurators will have to say to Your Excellency is that this villa is lost and its householders poor, and that if the cost of mercury is not lowered and also the day wage of the Indians they will have no means to sustain themselves.

And by way of this report Your Excellency may see, as the fifths have gone up each year and that the strongbox is filled with tributes like those of the rest of the kingdom, and how great is the consumption of mercury and coca, whose commerce amounts to a million pesos corrientes, since 90,000 to 95,000 baskets of coca are consumed, and in the year [15]83 it was 100,000. In Cusco a basket is priced at 2 ½ to 3 pesos, and here, on account, at 4 ¾ to 5 assayed pesos, and it is the commodity over which they make/do all the sharp dealings, for the great movement there is of it.

The dress and ornamentation of this town as I have already said is as splendid and costly as in Madrid, and the part of preparation and care [of clothing] is substantial, as they give seven or eight reales a day to an Indian; the games and raffles are countless; the office of handball judge is worth more than 6,000 pesos a year, and the lord viceroy don Francisco de Toledo did not wish that in his time there be such things (180), because all should be devoted to occupying themselves in the refining of ores and in transporting them, due to the inconvenience that follows from having lazy people, especially in this town site. The religious bequests are most magnificent, as we can see that in only a few years' time the fathers of the Company of Jesus have constructed and finished the house and church they have, plus many other possessions, and they usually extract, in a single demand they make for such works, 14,000 or 15,000 pesos. Things that demand admiration, yet on the other side, see how ruined the mountain is, and the worthless ores, and everyone with such great quarrel and misery. The concordance of these things I leave to the procurators who have the obligation to give explanation for everything.

In past years there issued from this town council an imposition, which is confirmed by the audiencia, of ½ a peso per 100 of all the cloth that enters this villa, both that of Castile and of the land, [and on] coca and victuals, for a bridge and other repairs, and it has

remained despite the reason for its issue having ended. They give a man 500 pesos who is trusted with collecting it, and some are proposing to farm it out by contract; and now the audiencia has given a staff of office to the collector, when up until now there was no such thing.

The incredible grandeur of this kingdom, of Castile, and of Tierra Firme are witnesses of how great the wealth has been that has come out of this mountain. And so that Your Excellency may see the quantity that has come out of it I have made an account of that which was brought to this treasury to be taxed the fifth, although the books for the first fifths are nowhere as clear as those there are today, because in the first years they did collections with a common scale, such was the abundance there was, and I found I could not give full account of this if there had not been a verification there for me in the report made by the lord viceroy don Francisco de Toledo in the year [15]74, before they began mercury refining, and he discovered that it was 76 million [pesos]; and from this year until the day of St. John of [15]85, it appears from the royal books to have been consumed [sic] 34,715,215 pesos; such that all together it makes 110,715,215 assayed pesos, minus the silver the silver extracted yet to be taxed, which is innumerable and has been charged the fifth in the other royal treasuries, because, although it has been helped by other mines, it is little with respect to that which this mountain has given and still gives; and from today forward more so, with the new favor and gift that Your Excellency will surely give to this villa, it shall return to serve with the richness it has hidden in its entrails, for God, who created it, and for His Majesty, to whom it belongs, and to Your Excellency, and to all the kingdom [of Peru] and to that of Tierra Firme and Castile, and in this manner Your Excellency will have contented all of Christendom.

Of the tributes of the kingdom and encomenderos, priests, corregidores [of Indians], protectors, and caciques.

The gravest matter there is in this kingdom is that of the tributes, as in them there are interested parties, and proceeding from the sweat and labor of these new vassals of His Majesty, and being a thing that greatly reflects his royal conscience, being tolerable and just as they shall be, those now in place, inasmuch as they will keep this villa in growth. And as it is a subject of such quality I did not want this report to remain without touching upon them for Your Excellency, and also of the reasons for having been ordered the way they are, from which one better understands the rigor and disorder of the past ones, and in what way these most recent ones have benefited the natives, and the inconveniences that time has revealed, worth knowing so that the Indians will not be damned by such a chaotic business. I realize that an intellect [ingenio] other than mine was needed to treat it [properly], and if this had really been taken into account, there would have been a thousand reasons to drop it due to my ignorance [rudeza]. And please excuse me for having been granted this by one who had it in his care, the very illustrious lord don Pedro de Córdoba Mesía, when he came to this villa, in order to give a full eyewitness account to Your Excellency, of the state of things. And with his notable and clear understanding he took away a full comprehension and sounded the gulf of his business and government, as he surely intimated to Your Excellency the necessity there is to give order and remedy in it, and thus I plead with Your Mercy to be served to favor it as his own, so that with

this it serves as worthy of acceptance by Your Excellency, as I have done that which I knew about, plus all that I could besides without losing sight of the truth.

After the licenciate Pedro de la Gasca had finished his pacification of these kingdoms, he attempted to put his government in the best order possible given the brief time he had charge of them. And among the things most in need of remedy were the rates at which the natives were to give tribute, by way of recognition and vassalage to the majesty of the renowned kings of Castile, whose vassals they were, and to the persons to whom they had been entrusted in his royal name, for having helped in the conquest and discovery of the kingdom, there being nothing in the land that could satisfy them for the service they had rendered in this. And although they were unable to set the rate with the justification and equality that was required (taking account of the number of Indians who could pay it, but only keeping record by houses in the villages, counting them with lance in hand, without knowing the number of people there were, nor those who were impeded by age or lameness, plus the widows and useless folk, as the Indians were dispersed in places where one could not find out with precision their number, taking the censuses by rough estimate, without knowing the nature of their lands, trade, and saleable products; and they took advantage of the caciques by using the tax assessment and distribution by khipu and general audit done by Huayna Capac, former lord of these kingdoms, and father of Atawallpa, who was the king or tyrant in whose time the Spaniards entered the land) and although this order suffered from great error due to the many people who were missing due to persecution and death in war, in truth the fruit was so unripe it could not have come to maturity, nor did the disposition of the negotiations give space for anything else, and it seemed enough, the reformation of that time, as it remedied some part of the confusion that the mode of encomienda that had been done by the marquis don Francisco Pizarro, handing the villages entirely over to those persons who had been given them, and leaving them to take from the Indians whatever they could reasonably contribute; from which there followed great injustices, which they received in the form of excessive rates of tribute being taken from them.

So, as the lord viceroy don Francisco de Toledo had finished the rebuilding and reduction of all the settlements of the kingdom, it became clear the true number of Indians able to pay tribute; and the quality of their lands; and if they had or worked mines of silver or gold, or if such existed in their districts; and the barters, trades, and saleable products they had; their staples, livestock, and other means of gain, such as being within range of cities and royal roads, and so how their products could go out and they could take advantage of grasses, straw, and firewood, eggs, fowl, and supplies, and because those who are in remote parts do not value these things they set the rates declaring the quantity that each allotment [repartimiento] had to pay according to an aggregate estimate; and later making a personal distinction for each Indian by his name and the ayllu with that which applied to him and was obliged to pay and contribute, either that which had to be given in silver or gold, for those where it was presumed that they had hidden mines that they would thus have occasion to work them, and for the rest that they would be encouraged to come to Potosí and look for it, whether in cloth, livestock, or food, appraising and setting a rate for everything according to the prices at which they were commonly valued in their homelands, converting them to silver, leaving the Indians and

communities free to pay it in kind [en especie] or in the silver that each commodity had been rated at.

The same was done so that they would understand that those (182) commodities and things, which they raised or acquired, those who had need of them, they would have them sold to their encomenderos in that price; and if with time it went up, they would benefit from him; and if anything else happened they could comply by giving it in kind; founding it on the basis that the tribute cast upon them be set at a quantity equal to the lowest price, and, well, this is how it was, the increase and greater part remaining with them if they wanted to take advantage of this benefit. And on this article the Indians of the province of Chucuito have filed a demand with His Majesty saying they are not obliged to hand in cloth they give but rather only to comply with three assayed pesos at which they were assessed, and that the remainder, which is more than two pesos, at which they normally sell, is theirs, and ought to remain in the strongbox for their account. To which the royal officials respond by allowing them to select that which they think best before handing it in, and that with this they have complied, citing the clause in the tribute that says: 'they shall comply with that which they wish to choose of the two things in order to pay it,' but that they do not have right to the price at which it was sold because it could also be less. And the royal audiencia issued an edict in which it declared that the Indians must comply by giving the silver in which they were assessed, as they do not have the reason nor capacity to choose the best.

A census was taken so that all Indians between eighteen and fifty years of age would pay tribute, and that upon marrying, boy that he might be, he owes the tribute. They did not exempt anyone beyond the principal cacique, plus the second-in-charge of the allotment [repartimiento], and the firstborn heir, and the musicians and singers of the church, and the fiscal that all the priests have, so that they can collect all the people for the doctrina and give notice of those living in concubinage, and also the alcaldes and aldermen [regidores] for the year of their election, the community paying for them for being occupied in the administration of their republic. And to some it seemed quite rigorous that the legitimate sons of the headmen and lords be counted among the tributaries and not of higher condition than those subject to servitude, which they did because long ago they were not privileged nor exempt, although they did not pay tribute as they really should have, rather charging it of the administration of some thing in which they were occupied in the service of the prince.

And it is worth knowing that the tributes and rights the Incas had were not of our mode, because in their kingdom there were no sales taxes [alcabalas] nor customs duties, nor a single impost on cloth and victuals. It was enough for him to receive from his vassals all that was necessary to sustain the royal estate in pomp and grandeur. And thus some gave him the personal service of his house, which was infinite the number he had in this capacity; from other villages the people had to tend to the garrisons [guarniciones] and borders, and the supplies for ordinary expenditure, plus that made by the governors and captains lodged in his court, like he of the armed forces and warehouses they had for storing much food and cloth. He had large pastures for livestock [Ilamas and alpacas] with which came great numbers of shepherds, and many Indians who worked the

plantings and mines, and giving him many master silversmiths who were continually making diverse wares [vajillas]. Others occupied themselves in hunting and others in fishing, and the comely women who were in the enclosures of the huacas and other dedicated sites were for him, occupying themselves in spinning fine wools from which they made curious textiles for him to cloth himself. And finally, the whole kingdom served him and presented him with the things there were of esteem and value, his house being a customs office of various presents brought to him from all parts.

His Excellency also believed, in charging them tribute, by impeding the harm that the Indians had received with the many headmen and overseers, for the subsidy and servitude that followed as a result of them, that this would cease by making them tributaries, stripping them of the brio to rule with the title of lords. The fathers and caciques greatly lamented seeing the boys and much worse, their sons, declared tributaries in the new assessments, that they had to pay although they were still subject to paternal authority and had no goods of their own. And since this seemed excessive, the age being so young to oblige them to pay tribute, as they were poor and with the obligation to take care of their parents and nature dictating that they should reserve their labor for their increase, but when consideration was given that they might set tributes according to the capital and holdings each had, [it seemed that] all would remain free from it, and for this same reason they were not granted this.

The tribute was imposed on them for their own personal labor, so that they would be forced to work and to make them wise stewards of their gains, as they are vice-ridden people and disinclined to their own improvement, without being forced into order, and because from this age to fifty is the most apt time to gain something from them and if they were exempted any longer it would give them reason not to marry and wander around vice-ridden, and especially since from the time of the Inca they had this custom of paying tribute with their person, occupying the boys in many tasks, cultivating the plantings and plots, and also the women whose husbands were absent in service of the Inca in war and in constructing buildings and public works. And because these things are personal service, which is work without pay, it was considered that they would not receive a new charge in paying tribute after this age, as their occupation was profitable and the caciques profited from them. And it has occurred to some that to come to this villa, the work being better than in their pueblos, it would be well to have arrived at twenty rather than 48.

One generally finds in the kingdom, with every thousand tributary Indians, 4,000 persons, and as many [i.e., about 1,000] males between 18 and 50, and the same for those 17 down to those at their mothers' breasts; and the tenth part of the males between 50 and decrepitude plus the lame, blind, and useless, and as many women as the total number of males. And they were the tributary Indians. They were given new assessments with great rectitude and consideration and very just and Christian documents, discharging the Indians of great vexations and tyrannies in which they had been placed, as much by the encomenderos as by their caciques and priests.

And in order to redeem them of the personal services and of the many tax assessments heaped upon them under the title of tribute, in which they were quite damned, they formed a body of those there were to be paid by the community with such justification that, although there were still lacking the new people who were to distribute part of the assessment, for the discharge of the obligations of the encomenderos, those who were singled out and ordered to pay tribute were those rightly ought to give it.

From which quantity and sum, before everything else it is ordered to take out the priest's stipend, the encomendero being the one who owes it as he is obliged to give them indoctrination, and because the main reason they were entrusted was for this, and that from the community strongbox it be paid by order of the corregidor, without the encomendero involving himself in it, because before they were paid by his hand, as patrons as they said they were, and if the priest was not to their liking they deprived them of it and often gave it to others who lent them money for that purpose; and there were vacancies, such that the Indians went a long time without indoctrination, ordering that those [funds] collected on behalf of the Indians from then forward remain in the strongbox, because before then the encomenderos took them, and at times the prelates when they audited, and they converted them into [church] ornaments. And this shortage of indoctrination built up a great sum in which they [the encomenderos] were condemned when the general audit was made, and they have not been satisfied with it, asking for that which there had been since the time of don Francisco Pizarro. And later it occurred to His Excellency to enforce this, due to the wars and battles there had been, in which they found the householders, and the lack or surplus of priests, he ordered that it be ascertained from the time when President La Gasca allotted the landholdings and assigned tributes, which was in the year 1549.

And because His Majesty has in the Indians who are placed in his royal crown, like those in private persons, they being obligated to the defense and care of the natives, there is also taken from the tribute fund the salary of the corregidor, a most important charge for the conservation of the state in which the Indians are placed by the audit and reduction, because lacking this minister and executor and preserver, it is not possible to carry forth the order that was given so that they not be bothered, and to take care that (184) the tributes be placed in the treasury, and that the charging and distribution is done with equality, a thing so important to the conscience of His Majesty. And it also seems that it would be worthwhile if he was obliged to do the census anew each year, erasing from the previous one the dead Indians and those who have passed age fifty, and putting in their place those who have turned eighteen. By a second decree the lord viceroy ordered that the corregidores not do this, as it was not appropriate to grant them commission and power by which they might innovate and alter the assessments, and there is no lack of corregidores in this province who hear Indians claiming they cannot comply with the tribute due to the many who have died or absented themselves, as well as for those absent being enlisted [elsewhere] during an audit, in conformance with a chapter in the general decree that ordered thus, and not having returned to their villages.

And the lord viceroy having these things in consideration, in the powers he gave to the protectors it was without access to this defense, it seeming to him but another way to

leave the door open to great inconveniences and novelties; and although it is pious and just to hear and help those who are aggrieved, these are cases that have to be petitioned and handled in courts and not in any other tribunal, anticipating an audit with the authority of the viceroy, because by this path all the allotments [repartimientos] could petition for the same. It would be appropriate also that the corregidores enforce that if an ayllu of Indians was assessed at fifty and twenty have died, the thirty should not pay for all fifty, which was one of the inconveniences from which they suffered the most damage and loss, even if the whole community of the said village made up for that shortage and it was not suffered by these [thirty] alone; but it would not be possible to do this in general with the whole village, although it would seem of notable diminution for being set up according to general rules [tough section!], but rather to give notice to the superior.

They likewise took out the salary of the letrado and procurator and protector that His Excellency ordered so that they disengage from the lawsuits they wanted to pursue, being unjust, and help them in the useful and fruitful ones, aiding them and defending them in those which they filed. The same ministers have to be, as much in the court of the lords viceroy as in the royal audiencias and principal cities, the heads of their districts.

Likewise it was an inconvenient thing to extract the tributes, for having incorporated them into the main body of that, that which the community of the Indians had to give to their caciques, of which they were quite careless, it seeming to them that they did not have to deal with them, leaving them with a free hand to continue their robberies: because it is an ascertained thing that the greatest tyrant they have had have been their caciques and governors, for having fatigued them with the rigor in which the Inca had them. And the lord viceroy, in order to incline them toward virtue and that they treat the Indians well, as persons who held the cacique posts and jurisdictions [cacicazgos] by title and grant of the most serene and Catholic kings of Spain, having ordered, the invincible Caesar, Charles V, may he be in glory, in whose days they discovered this kingdom, that they give the caciques and governors be obedience even though they were those whom the Inca had placed as captains and corregidors who had no other right than by his will, those ones remained with the lordship, mandate, and government of the villages in which they were found, and they took up the royal voice; and in the titles that they gave them of their cacique posts and jurisdictions, the audit being over, it was under the charge and addition that they live properly as Christians, fearing God and obeying His Majesty as their true king and lord, advising them that if their sons were likewise, they would succeed them in their charges, but lacking this, new and virtuous persons would be named in their stead, ordered thus, in accordance with a chapter in the general instruction of His Majesty, that their sons be brought up in houses of priests where they would learn our tongue and to read and write, and adopt their good customs, ways, and orderly life, leaving them disposed to the royal will and that of the lords viceroy, so that with this fear that they not hold their principalities as property they must not use them to aggrieve the poor for fear of losing them. And this they have not appealed, although the latinized ones wanted to try it during the lifetime of the lord don Martin Enriquez, by saying they were natural lords with legitimate title and right to the allotments and provinces in which they were found at the time of the conquest, and that as good and faithful subjects they gave their obedience to these most Christian princes, under whose protection and shelter

[amparo] they are, and that they did not have to separate them from this property and lordship those who possess it, and that, although some caciques enjoy cacique posts and jurisdictions by first grant and proclamation, it would be few those to whom they do not pertain by law.

His Excellency also set down to do it in this manner, to know that all the principal lords and governors had what they possessed by naming and title of the Inca, who did the confirmation and thus, when some headman died, the successor presented himself before him, and he gave him the investiture upon finding him able and sufficient to govern; because lacking this, although it pertained to him legitimately, the able was preferred to the insufficient, but that those named be of the same family, lineage, and house to whom the title pertained according to his customary privilege. And although a gentile had all these rights, how much better would it be to belong to a most clement and Catholic prince, and that which is desired is that they be virtuous and good Christians, and in order that this may be so all the most convenient and necessary means may be taken. And this was the intention of the lord viceroy, and not to subject them so that they could not make demands regarding the tributes [supeditarlos para que no reclamasen de las tasas]. And some say that it went against his conscience the stripping them of the defense in this article and of the freedom to air grievances, and that they did not dare do it because they are threatened with transport to Tierra Firme, a thing they greatly fear.

After having extracted all these things from the tribute, that which remains and results from it is given to the encomenderos, it seeming to them that all that which had been discounted and taken out in the things that have been referred to in the new order pertained to them and that, having taken out the priests' salaries, all the rest that was ordered were things in which the Indians were aggrieved, being done by those misinformed ones who did not realize that the natives do not receive from this the least vexation, but rather much relief, the increased expenditures from before not being at their cost, after having set the rate of that which they justly had to pay and contribute, as one must presume of the conscience of the lord viceroy and that of so many august and educated persons with whose opinion they did this, as they were not interested parties and they took into consideration that which in the past they gave the Inca, and that which they offered to infinite huacas they had, to whom they paid tribute with a great sum of riches, and others by personal services which along with the royal tribute were intolerable, leaving them without any known thing, and that which they now imposed upon them must be with gentleness and minus the harm they might receive should they be encumbered with more than they can easily and with moderation be able to give.

Of the Indians of the allotments [repartimientos] that have the obligation to come to this villa for the labor and benefit of the mines and mills, as in other parts where they have them, it was not determined by the general assessments that which they had to pay to the villages of which they are natives and subjects, remitting it to the corregidores de los partidos, giving them first knowledge of the order they had to have for that which had to be done with the Indians of His Majesty of the province of Chucuito, whom they assessed at 18 pesos those who reside in this villa, so that with this example they would give

attention to that which they had to do with the Indians of their jurisdictions who would reside here.

And thus they made different assessments, with the caciques present, considering the great interests they have in supplying this town with wood, charcoal, firewood, ichu or straw, and of livestock, for which they have their slaughterhouses, and candles, and maize, and flour, and their foods of chuño and potatoes, and fruit they bring from the hot valleys. Others transport ore to Tarapaya on livestock [i.e., llamas], and bring salt from the springs on their account; others occupy themselves in the labor of the mountain and trade in ores; and finally, even the manure of their livestock has value, because it is consumed and serves to give fire to the refining basins [buitrones], and even the bones have a price, in order to make the crucibles [cendradas] of their smelteries. The lead ores they sell in the square to mix with silver ores have also been worth a lot to them; at present it is little, as it is not consumed as used to be. And of the day wages they pay them in the course of the year, both to those on decree and to the mingados, they amount to more than 500,000 assayed pesos, as only the third of the decreed ones surpasses 280,000 pesos.

And keeping in mind these utilities and gain and how distant or near they are to this villa, for consuming in it the things of their villages, to some they charged and allotted at 18 pesos, like those from Chucuito, and to others at 20, and 16, and at different amounts down to twelve, which is the lowest rate. And the corregidores were given no leeway after this was declared, so that they were left powerless to innovate and exceed once they had set it.

With this growth and surplus of tribute that the Indians who reside in this villa pay, it supplements that of the villages and it has to be discounted from the overall total assigned them; in such a way that, if one allotment has 1,000 tributary Indians and by rate they were assessed 6,000 pesos and from this village there are in this villa 170 Indians, who pay 18 pesos, which amounts to 3,060 pesos, above all they have to go by the remainder that falls to the 830 who remain in the village, such that there fall to them 2,940 pesos, lowering the six pesos falling to each Indian to three and a half, although some corregidores do not do this distribution with equality, charging from each Indian of the 830 the three and a half pesos that falls to them, but not adjusting so that the richer one is charged more, the less so, less, and the poor one, little; which among people of reason is understood as all important.

And the opinion has been that they should not make distinctions in charging tributes, charging the rich more than the poor, and this order is observed by some corregidores, because it takes away [the tributaries'] desire to grow their estates, seeing that by having such they must give more tribute, and there have been many who have sold their goods and livestock, and the poor one is disinclined to augment it for the same inconvenience; and in order to remove them from this the lord viceroy encourages them to apply themselves to acquiring capital and having something to leave their children, guaranteeing them that no matter how much they have their tributes will not be graduated

or raised, but rather that they be aided and defended in that, because thus did His Majesty order.

And although the Indians who reside in this villa do with their labor and risk of their lives this benefit to the villages of which they are natives (as they pay almost as much as all the rest together, and in silver, and the rest in what they possess, which is cloth, food, and livestock, from which may be seen how important this town site is, and the benefits that follow from it), and these ones enjoy the fruits of this same benefit when they return to their villages, because those who come to serve in their place do the same in favor of the first, and thus this communication goes along from one to another.

It was attempted with all possible means to set the tributes so that the caciques did not have to make adjustments, experience having shown the inconveniences that have resulted from this for the communities (and it was not possible), especially for those allotments that serve in this villa, although the rest can have adjustment according to the community's goods and those of each Indian. But this would seem a thing clearly understood, and nothing like the confusion of those here, and I understand that neither in these nor in the others do they observe the least rule or contract. And the corregidores should really take account of the risk the poor ones run for having occasion in hand to defraud them by charging the entire tribute, as they do in the allotments, giving them to understand that the excess paid by those of Potosi is to fill the gap left by the dead, absent, and sick.

In order to remedy this there is an order that the priest of the village keep two books: one in which are set down those baptized, and in the other those who die, and the ayllu to which they belong, so that it would be understood in that which comes later, should there be another general audit, whether the people of such and such village are increasing or diminishing, and so that the caciques cannot usurp the tributes, not meddling with them, for the dead and those reaching fifty years of age, the young men reaching eighteen, or by chance charging the elders. And should there not be another general audit, no reason would be sufficient to be able to dispense with that which they now pay in tribute and of the number of those who give it, since there might be some reduction that could not be foreseen, or likewise it could have some growth, there being no general epidemic [peste general] and notable mortality. And thus, it may be said, the rate compensates one for the other. And from this comes what some of the audiencia judges and ministers of His Majesty have told me, that the tribute rates ought to be fixed by regional estimate or according to the actual number of tributary Indians, and not according to a rule that combines both these things; because if they do it by set amount it has to be with such moderation that they can pay at the rate they cast upon them, without harm should the number of people normally deemed sufficient to pay falls short; and if it is done personally, by counting each head, no more than the living should give. And for not having done it in this form, they charge by set rate with the living paying for the dead.

And this argument does not end, and it was deemed convenient to do this by both means, so that the caciques not go along being remiss and careless in the matter of adding in tributary folk, which are those who get married or who turn eighteen. And it is well that

they take this care, as persons obligated to do so, and who understand that according to the set rate they owe it, as there had been made a careful account of the Indians who had to pay the entire amount by headcount. Because if they did not produce a headcount of the land the general audit would be of little value, due to the said inconveniences, and for those who then died, there would remain a sufficient number of the living to go in their place. And this is based on reason and justice.

And because all the yanaconas who are absent from the allotments [repartimientos] where they are natives, living in the cities and villages of the kingdom, both serving Spaniards and occupying themselves in diverse trades, they pertain to His Majesty, and are obligated to pay and contribute according to a rate charged by royal officials. And formerly the yanaconas here [in Potosí] did not pay, and when the lord don Francisco de Toledo visited this town he had them enlisted in a census, they being up to that time in the possession of free persons; and he set for them a tribute rate of nine assayed pesos and there were few who had remained, as they lacked the advantage of rich ore, which was the pastime they used to have, and in enlisting them they stopped going. And the caciques of the allotments from which these vanaconas come do not have the right to collect tribute from them, as they are not audited together with them, but they can do so from some Indians who come to serve in this villa, where some stay, or in the valleys of Chuquisaca, they have to pay according to the rate set for the rest who do the mita, although they have [previously] complied with this obligation. And it would not be enough to pay the tribute they give in their villages, as this would diminish them and so that they not go denaturalizing themselves it was decreed thus.

For the salaries of the corregidors, lawyers, and procurators, and other good effects no less useful and necessary, according to the assessment, it was decided for that purpose that each tributary Indian give one assayed peso per year. And although it was a lot, for something that they clearly knew did not need so much, the lord viceroy attempted to apply the remainder to His Majesty, treating it as a kind of pension charged of all the allotments in some respect, as he wrote to His Majesty. And it seems he did not accept it. And as one who knew how fatigued and poor the Indians remained after the general audit and resettlement, and that the villages had need of their own means so that with them they could help the poor to pay their tribute, he issued a decree in which he declared that that which he assigned for the said judges, lettered men, and defenders, in many of the allotments [repartimientos] was more than what was necessary for the said effect, with respect to the adjustment and lowering of the said salaries that he had been ordered to do. and that he communicated this to men of letters and with their consent it seemed convenient to disoblige them of that imposition and excess, and that collected up to that time pertained to the Indians, to whom it was adjudicated as their capital, and that from that point onward they pay that much less, enriching themselves with the part collected so that with it they could lend it at 5% interest [darlo a censo] and purchase estates, and with them pay the tributes of the poor, and convert it into whatever was of greatest use to them, for the difficulty there would be in distributing it individually to the Indians and as it would not be so profitable.

And regarding this the lord viceroy don Martín Enríquez dispatched a decree in which he ordered that the two-thirds of the rents that the communities had be distributed in helping to pay the tributes of the poor, (188) and the other third be kept as community property. From which the kingdom has been enriched and fattened with the silver that is in the power of the natives since the year 1575, when the tribute rates were published, up to [15]80. And the said lord viceroy, in execution of that which he found mandated, ordered that an account be made of that which was truly spent on the said offices, counting the salaries of the ministers there were, and it was found that one quarter of the money that had been consigned for this was sufficient. And thus he set a quota of two tomines of assayed silver for every tributary Indian, cutting from their tributes the other six [tomines] that until then they had paid in extra for themselves.

Many understand that this cost could be excused, because the Indians in their private dealings do not fail to pay it to other ministers, notwithstanding that of the general labor draft. And the reason is clear, because the caciques are those who have the lawsuits and quarrels with their other householders, and as the community is that which pays the salaries, they once again satisfy [settle?] their lawsuits. And His Majesty having been informed of these things he has sent out a decree, received only a few days ago, which calls for the protectors to be removed.

And I understand that the one of this villa is quite necessary for the defense of the Indians, because it would be a great inconvenience to deprive them of this aid, as the encomenderos endow them with the cost they have in this (as I said in the previous part), because they will give them no shortage of grievances and mistreatments and many other vexations, and they are forced to go to lawyers and procurators who put their petitions and complaints in order, and according to their interests they bring them to understand what it is they want; and the interpreters will take the place of the protectors, which is no small harm. And it seeming that they remain free from the servitude of the one, they remain subject to all. And the poor will suffer for it, as they have no one to whom they may complain of the injuries done them by their caciques and captains, because by keeping the judges content at the community's expense, giving them Indians and other things, they cannot achieve justice. And the crimes done to them by the Spaniards will not be punished, and although for this part it is necessary to succor with defense, it is greater that which is needed to free them from the mines, justices, who with this title do them a thousand harms. And for this and for that which I have said, in the post of judge of natives it is not convenient to render them justice.

Beyond that said, the protector of this villa has an obligation to see that they are well paid and in their hands, without the kurakas and captains receiving it in their place, nor to consent that there work in the mines and mills more than ordered, without assigning them tasks; and to make sure they do not work in dangerous or rented mines, because for the most part there occur in them many disasters as they are taken advantage of without repairs being done as they go along working, and that they not be occupied in things outside those for which they are assigned by the allotment; nor to consent that they be made to act as porters and to give notice of those who are sold and rented, being sure to be present when they share out the 500 Indians by month and week, and for transport and

the salt springs, and that it be in accordance with the order given, without fraud, nor allow that any Indian be taken out of the part set aside during the off-time [huelga], and to demand their evacuation when the mills are sold, and to be sure and be present during the inspection of the jail so as to request their freedom; and for those sites where they do service, that the salary be equivalent; and those who come transporting coca and other commodities, that they be paid according to the time they have served and not by the trip, as they are usually left damned by this; and that they yield their tributes in the form obliged by this royal treasury, making use of that closest at hand, as many times they tend to offer in coin that which they can comply with in bars. And finally, the protector is a representative [fiscal] of all of the estates and he who goes out giving notice of that which the Indians have in their dealings.

I have a long report to Your Excellency of the things in which the protector ought to be occupied, so that if things go as they should, the effects that follow from him will be seen. And things could result that could not come about or be substantiated without them, nor be sufficient to pass the word to the officials of the audiencias as to the general things of the kingdom, thus consenting and accepting that which would be in their favor as if supplicating from the contrary. This royal audiencia named as protector of this villa the licenciate don Francisco de Vera, a virtuous person and capable of a greater office for his quality and letters. Before him no lettered men ever held this position.

For the custody and guardianship of the goods and estate of the Indians it was ordered that in the allotments there be a community strongbox with three keys; one is kept by the corregidor of the faction, the second by the principal cacique, and the third by the second-in-command, and if he is impeded or unable, by one of the ordinary aldermen, although it is true that rarely do the Indians have force to follow this rule, and in the remaining allotments the corregidors have it, not letting them have a hand in it, and with the silver of these strongboxes many have made themselves rich by following with it many investments and ventures, which are done with harm and vexation to the Indians. And on this the lord viceroy don Francisco de Toledo wanted to try to order that the community strongboxes of the whole province's allotments be concentrated in this villa, naming a treasurer who would keep account and keep things clear with the Indians. It was such an important thing that there was nothing else of greater utility. And as there is danger in everything he let it drop, but this was the biggest thing.

There are some who presume that the encomenderos have right to this money in the strongboxes, on the basis that the reasons for which they took this from the body of the tribute was for the obligation they had for the defense of these people, and they want to feel that, as His Majesty has the jurisdiction and supreme power, it is his charge to select the ministers who exercise it and for this reason and to sustain the kingdoms in peace and justice, by divine law the tributes and duties are permitted. But this must be understood when no grant of them had been made to his vassals, and when this ceases, they only owe that which the judges and lawyers truly cost, and that likewise the surplus they took from them for this should pertain to them, as the rates were set with justification of what the Indians were to pay in tribute.

And some encomenderos have filed complaint and the lord viceroy, in the decree I referred to, said that should there be any doubt that some of the rates were high, and that the Indians were burdened by them, they would be made this recompense and freed from it according to his conscience. Only the Cañari Indians remained exempt from tribute, they being a nation whose base and homeland is in the land of Quito and who served the Inca in war, being a bellicose people, and reserved from tribute. Today there remain some part of them in Cusco and Chuquisaca and they have served both in the civil wars as well as in the conquest, as they are innately spirited and inclined to war, and they have helped to search out and apprehend delinquents and they do it with brio and skill, much like squad members of the Holy Brotherhood, and they accompany the justices in the execution of sentences with their chuzos [pikes], which are certain weapons they used to fight with long ago, and they are of good appearance. And they do not have this exemption from the tribute lists, but rather from a mandate and privilege that those of Cusco got from the royal audiencia of Los Reyes.

The writing of this report was finished in the villa of Potosí by the hand of the father friar Nicolás Venegas de los Ríos, prefect of the order of Our Lady of Mercy, of the monastery of the villa of San Juan de la Frontera, on 9 August of this year of 1585.

The mines of Potosí: the miserable condition of the Indian miners, 1 July 1550, Fr. Domingo de Santo Tomás to the Council of the Indies (in José María Vargas, Fr. Domingo de Santo Tomás, defensor y apostol de los indios del Perú: Su vida y sus escritos. Quito: Editorial Santo Domingo, 1937, pp.15-21. Orig. ms. in AGI Lima 113)

It must have been about four years during which this land was about to be lost that there was discovered a mouth of hell, into which have entered, as I say within that time, a great quantity of people, which by the greed of the Spaniards they sacrifice to their god, and these are some silver mines that they call Potosi. And so that your highness may understand that it truly is a mouth of hell that, in order to swallow up souls God permitted to be discovered in this land, I will here paint something of it. It is a hill in an extremely cold wasteland, around which for six leagues in all directions not a single plant grows that can sustain beasts, nor is there firewood to cook food. Indians bring these things on their backs or on llamas, those who have them, and the same is true for all that is necessary for the sustenance of the Spaniards and Indians who reside and remain there. The closest source for these things is 12, 15, or 30 leagues away, and the farthest is Collao, a hundred leagues away. A bushel of wheat commonly costs 30 castellanos in that place, and most often more; the bushel of maize, which is the food of the Indians, from 15 to 20 castellanos; the bushel of other foods of theirs called chuno and potatoes, which are roots of plants, at 12 or 15 castellanos. They take the ore from that mountain I mentioned with all the labor one could imagine could be taken out of them, both because it is a great task to remove the ore from so deep among so many rocks and with such danger of frequent mine collapses, as well as what happens to them from the cold and distemper [destemple] of the land. The charcoal to smelt it [the ore] they bring from six leagues away and more. The firewood with which to warm themselves and to cook their

food from the same distance to the fame of this hill and its richness from 200 leagues and more, from here 250, from there 230. From 180 leagues away they send the poor Indians by the force of each allotment [repartimiento] according to its rules. From one allotment fifty, from another sixty, from another 100, from another 200, and so on in greater numbers. However contrary to reason and the laws of free persons this may be, anyone who knows what freedom is ignores it, because sending off souls by force is either the condition of slaves or of condemned men to such a great penalty for grave crimes, and not the law of the free which your highness in his provisions and ordinances claims these poor folk to be. [goes on to emphasize hardships of travel to mines vs. mine work, challenges those who say Indians do well in mines. True only of some yanaconas, according to Santo Tomás.]

Relación del Cerro de Potosí y su Descubrimiento, 1572, Rodrigo de la Fuente Santangel, clérigo presbítero (in BAE 185 1965, 357-61, orig. in Biblioteca Nacional Madrid, ms. vol. J.58., 6ff.)

Account of the Mountain of Potosí and its Discovery

It is notorious how men who in a Christian way want to understand the works of nature must be guided by its Creator, who from them produces incomprehensible ends for the benefit and utility of the human species, because, seeing them, to praise the name of God and be to his honor and glory; to whom I beg to give me light in understanding so that I may manifest with truth that which I here want to declare to the peoples that today wish to know it and to remain in memory for the coming centuries how and when and in which time and for whom Our Lord was pleased to make known the riches in silver, so immeasurable, that were there and lay hidden in the mountain that the natives of this land of the province of the Caracaras Indians called and today generally throughout the whole world is called the mountain of Potosí, on account of the considerable news of it there is for its great wealth. And coming to recount how what I write came about, it was:

On the 31st day of the month of December in the year of our reckoning of 1572, being present the most excellent lord don Francisco de Toledo, viceroy of these kingdoms of Peru and Tierra Firme, in the imperial villa of Potosí, and on this day being present myself, Rodrigo de la Fuente, cleric and preacher, in presence of his excellency, there arrived an Indian with a petition saying he was the son of the first Indian to have discovered and given news to the Christians that there was silver in the mountain of Potosí; and that his excellency should give him a reward according to such a great service, and, well, it was obvious to the old residents present in that town that what he was saying was true.

His excellency was most happy to hear this petition, being as he is such a friend of doing good to the natives of this land, and he ordered me to take testimony to see if what this

Indian was saying was true, as in the imperial villa of Potosí, where we were, there were people who could truly say whether or not what this Indian said was thus.

This day I went to the house of the father of the Indian who presented the petition to his excellency, where he lived with his children and wife in the *rancheria* [Indian township], and I took with me Jerónimo Hernández, fluent in the general language of the Incas and also in Aymara, so that through him I could better understand, and I found in the said house an Indian of good disposition and aspect and of superior reason and understanding, because despite the many questions I asked him, although he was in bed sick for days, and of this same sickness he died after fifteen days, he always gave me a great outcome in everything. He could have been, according to his appearance, 70 years old; he certainly seemed to show them, being surrounded by nine children, five of them women, all of a mature age and with children.

This Indian was called in his language Gualpa, and after being baptized and married he was called (p.357) don Diego Gualpa. He was a native of Chunbivilca, of the town they called Llanqui, of the *repartimiento* of Licenciate [Benito Xuárez de] Carvajal, on the outskirts of Cusco. He told me that in his land he was the son of a headman [*principal*] whom they called Alcaxuca, of the ayllu of Hanansaya, which among the Indians of this land they consider of high birth [*calidad*].

I seeing this Indian fatigued with his long illness that he had suffered for some days already, I consoled him spiritually and he received the consolation in a most Christian way, saying that he knew well that he had a soul and body, and that he was a creature of God, and that he hoped for the salvation of his soul, having been baptized and having lived in marriage with his wife for a long time, and that God loved his creatures very much, especially those who recognized him and believed him to be God and Lord, and that all this he had known since the time when the Christians arrived in [the land], as he had always treated with them and conversed with them, and had served them and heard the preaching of the padres; and that he had been confessed, and had made a will and entrusted his soul to Jesus Christ, as something done of his own accord.

I asking this Indian what age he was when the Christians entered in this land, he said he was already a fully grown man, and he pointed to a son of his who by appearance was above 25 years old; and [he said] that in that time he served Huascar Inca, son of Huayna Capac, lord of this land, as keeper of his feathers, a highly esteemed thing among the Indians, being as they were fond of adorning the head with plumes of various colors; and when the Christians gave battle at Cajamarca he was in his own land, and when the Christians climbed up to Cusco he went there with other Indians to see what people these were.

He chose to serve a soldier whom they called Cardoso, of the Portuguese nation, as he seemed to him by his appearance and bearing a lord, and he served him for a long time, in the course of which he climbed to the site of Porco, where there was news of an abundance of silver, as it was there that mines were worked for the lord of the land before the Christians entered it.

This Indian relating his history and narrating the events that befell him while serving his master, Cardoso, he said that he was given a letter for some soldiers who were in Chuquiabo, which today is the city of La Paz, and the soldiers seeing the letter became very angry about what it said, and to vent their anger on the messenger, a thing not done among proper and orderly people, they sent dogs after him to bite him and overtake him [literally 'dog' him], and his body was so damaged that he nearly died, and for this reason he did not return to where his master was for many days; and his master seeing the long absence of his beloved Gualpa, he asked about him among those who came from where he had been sent, if they had seen him. There was no lack of people to relate what had happened; he felt deeply the injury that had been done to him as well as the harm they had done to his servant; he came to Chuquiabo from Porco and found his yanacona injured with the dog bites; and telling him how he had suffered so for following an order, he [Cardoso] became greatly upset and went off in search of those who had done such a terrible thing, and he fought with them on an open field and killed one and injured another very badly, and he disarmed them, a thing that left Gualpa very much in his debt. He told me that his heart had not been wrong when he chose in his heart to serve this soldier Cardoso, it seeming to him that among all the many others that he saw, this one had the greatest personal valor.

This soldier Cardoso left the province of Charcas and the site of Porco to attend to business matters offered to him, and he went to the city of Los Reyes [Lima] and left this Indian Gualpa in the charge of another soldier friend of his, who was called Marín, with whom he lived for a time [engaged] in bartering and profit making, which was already customary in the site of Porco.

He said more, that one day there united four soldiers, called Marcos Xaramonte, Alvaro de Olmedo, Gaspar Montesinos, and Juan Camargo, to see a hill of *soroche* [silverbearing lead sulfide, or galena] that was located next to the mountain of Potosí, which today we call the sites of Gonzalo Pizarro, in search of mines and *soroche*, and they told him, being on the said hill: 'go look at that mountain and on the very top you will find much worked silver and gold offered to the *huaca* that is therein.'

This said Indian Gualpa climbed the mountain along with another Indian whom they ordered to go along with him, as the climb was substantial and rough (p.359), a distance of more than 2,000 paces. Going along on their errand with difficulty, both Indians arrived at the very summit of the mountain of Potosí, the same which has a mesa at its very top about a hundred feet across, more or less, and spreading out equally in all directions.

There they discovered that there was a shrine [pertaining to] the surrounding Indians and there were a few offered things of little importance to the *huaca* that was there, all which this said Indian don Diego Gualpa gathered up, and he loaded it onto [the back of] his companion and sent him to the four Spaniards who were down at the sites they named for Gonzalo Pizarro.

This Indian Gualpa stayed there alone on the mountain of Potosí after having sent his companion with the booty of the *huaca* that was on the highest point of the peak to the four Christians who had sent him. One can piously believe that it was the will of God our lord that that treasure, which for such a long time had been hidden underground, was revealed to mankind for his glory and honor by the hand of an Indian who had but poor knowledge of your divine majesty, so that he and the others of this land might understand, as today they go learning to understand, with the great concourse of good priests there has been, that there is our God and Creator of all things, and that they forget, as they are now forgetting, the belief in which for so many thousands of years they have been blind and deceived by the Devil, and that their idols and *huacas* had the power to give and take away man's bodily health and also provide for his necessities, as for this they were invoked with offerings, presents, fasts, and sacrifices and spilling of human blood, as is entirely known among the priests who preach the evangelical law to them and among many other curious persons who with Christian breast [or heart] aid this necessity.

He said that upon descending from the highest part of the mountain, there came a wind so great that it knocked him to the ground, a common occurrence on this mountain of Potosí as it has great gusts, being scoured on all sides and as nature has created it in the shape of a point of a diamond, where he lost his senses and remained for a space of time after coming to, without being able to get up. He looked all around to see if his companion he had sent to the four Christians had returned, who said he was [also] called Gualpa, *vanacona* of the said Marcos de Xaramonte.

Upon rolling over to lift himself up, he put his hands on the ground, and they made a mark in it as if one were passing his hands over well smoothed clay, and it marked his hands; and as the hour had arrived in which God Our Lord took as right for his service that such an immeasurable treasure should be made known to humanity, he opened the eyes of understanding of this Indian and he recognized that it was silver ore upon which he had placed his hands, as he had seen in the camp of Porco another ore like this, and he took of it a quantity of eight or ten marks [about four or five pounds] and he descended the mountain in search of the four Christians who had been sent, the same which did not wait for him but had returned to Porco.

This Indian Gualpa went to Porco and showed Alvaro de Olmedo the ore he had brought, and told him what had happened to him, but he made light of what the Indian told him, saying it was impossible that from the mountain of Potosí he had brought something so rich. He responded that it was certain that he had told him the truth, and that if he wanted to see for himself, they would go to take a look together. And by his persuasion they left Porco and came to the mountain of Potosí, which was about five leagues' distance, and with difficulty they went climbing the mountain, and arriving near where this Indian had extracted the ore he showed to the said Alvaro de Olmedo, there came a wind so great that it smashed into the said Alvaro de Olmedo, tearing off his cape and hat and knocking him to the ground, and this made him very upset, which, on top of the fatigue he felt from the trail, caused him to become quite disgusted, and he was angry for having come, as he was afraid to be in that place not frequented by Spaniards, and out of this fury he struck the Indian (whom he hoped would make him rich) with blows and he tossed him by the

hair, and with this anger and sudden assault he did not want to go where the said Indian Gualpa had found the ore that he had shown him, because God did not raise this man so that he would be the first to enjoy these riches, but rather another that came later. And thus they descended without locating that which had been revealed, and they arrived at what is today called Guaina Potosí, and the Spaniard Olmedo said to him: 'in this place there are silver mines, but not where you took me, where there are nothing but *supays* or demons,' which is to say the same thing.

When this Indian saw that the Spaniard Olmedo did not want to reach the place where he had taken the ore that he had shown, he told him in Porco: 'take half of this ore and smelt it,' and the Indian was left with the other part; and smelting this, the said Alvaro de Olmedo, as a thing God had not nurtured him to do, everything went up in the smoke, and the Indian Gualpa smelted his part, and adding to it a bit of *soroche* [galena], he took out almost as much silver as he had put in as ore, from which, he said, he took great satisfaction.

Twenty days later, this Indian Gualpa returned to the mountain of Potosí, to the spot from where he had brought the ore he smelted in Porco, and there it was on top of the ground like tallow, a gift of the sun [a manera de sebo regalado del sol]; he said that with a stave he gathered it together and put a quantity of it in a gunny sack or *guayaca*, as they call it, and he descended to Porco and smelted it together with the ore from there [i.e., Porco] and from it he took out very fine silver.

For the most part, the good things that befall men, if not communicated to one's friends, do not make the spirit as content as when one shares them, and to enjoy this privilege and contentment, this Indian don Diego Gualpa had as a friend a *yanacona* whom they called Chalco, native of the village of Accha, next to Cusco, Inca by nation, to whom he said he had discovered on the mountain of Potosí much wealth in silver, and he showed him what he had left of that which he had taken from the said mountain and related to him what had happened to him in the course of discovering it. As for the most part nature allotted among the Indians of these parts greater inclination to the Inca Indians than to the rest of the nations herein, this *yanacona* Chalco was anxious to see and know where his friend Gualpa had taken out this richness in silver, and he pleaded with him to take him to see where it was that he had spoken of and shown.

Both went agreeably to the mountain of Potosí and he [Gualpa] showed the place from which he had taken the silver he had, where they found it in the same state and way already recounted, at which both friends rejoiced, and as a thing so close at hand, and extracted with so little work, both loaded up with that ore and returned to Porco, made their assay, and from what they had recovered, which was a lot, and good, they parted in a brotherly way without weighing it, because they had taken almost as much silver as cargo as they had ore brought down from the mountain.

This *yanacona* Chalco, Inca by nation, served Lorenzo Estupiñán, householder at one time in this land, and with other *yanaconas* that he had in his service in the camp of Porco, he left them to Diego de Villaroel, who was his majordomo, so that they would be

occupied in whatever he ordered, this during the time that he [Estupiñán] went off to the city of Los Reyes [Lima], where in those days there resided the highest ranking people of this realm; the same said *yanacona* Chalco gave notice of what he had seen on this mountain of Potosí and he displayed the silver he had taken out in company with the *yanacona* Gualpa, and he swore what he said was true to Diego de Villaroel, majordomo of his master, Lorenzo de Estupiñán, and he urged him that there was much more than he had said; and with this display of silver and the Indian's guarantee, Diego de Villaroel, who was at the time in Porco, was disposed to come with other companions to see that which had been so clearly affirmed to be thus by the said *yanacona* Indian Chalco.

The *yanacona* don Diego Gualpa said that being one day in Porco, he saw coming along the road Diego de Villaroel, Gonzalo Bernal, and Juan de Portillo, Spaniards, with the *yanacona* Chalco and some other Indians with ore from the mountain of Potosí, and that Diego de Villaroel registered before a magistrate, first among the rest of his companions, the mine that today is in the vein of Diego Centeno, as it is known today; and this was the first one discovered and registered on the mountain of Potosí according to the will of God.

And this *yanacona* Gualpa carrying on with his confession of what occurred and what he had seen in that time on the mountain of Potosí, he said that next to the crown of the mountain there were at that time some ten or twelve large *quinua* trees, among which were beds of the lions of this land, and on no other part of the mountain was there the least bit of forest until you came down to what is today the township of the Indians and the Spanish village, that in these places there was ample woodland of the type called *quinua*, of the same which this Indian Gualpa showed me, a thick stave in his house, which was one from that time. I have wanted to mention this particularity, because today one does not find in all the (p.361) circumference of the mountain, nor in all the populated part of Potosí, one tree, nor even any other thing that looks like one, as it is now quite denuded [lit. 'threshed,' trillado] as much by Indians as by Spaniards.

This *yanacona* don Diego Gualpa said something more, that a great piece of this rich ore from the mountain of Potosí he gave to Antonio Quijada, a soldier from that time, and he still lives in this province, so that he would send it to the Hatun Apo of Castile, which in that time was the most ingenious Caesar Charles, fifth of this name and first [as] king of Spain, the same which was sent to President Gasca, and Licenciate Polo saw it sent, according to what the same Antonio Quijada told me this day above mentioned, that that was true, as he was then present in the imperial villa of Potosí.

I asking this Indian don Diego Gualpa how much time had passed since the discovery of the mountain of Potosí and its riches, he said that it had been 28 years and 9 months, a few days more or less, from the day he gave me this account; the same which he gave under oath that I administered and I required that he tell the truth based on the oath he had taken before this confession was made, and for the time when I was there, as he was at the end of his life and very ill. The same which passed before the witnesses written in, who were don Diego Conde Gualpa Inga, native of Urcos, next to Cusco, and don Pedro Gualpa, native of Cusco, and Francisco Hacha Angara, who were found present this day,

and other old Indians who were in the house of this don Diego Gualpa, whom he had known for some time, since before this said mountain of Potosí was discovered, the same which said that it was called this, this same mountain, before its wealth was discovered and extracted, as it still is.

The same witnesses said it was true that which the said don Diego Gualpa had said, and they affirmed under oath that for this purpose I took from them, being present and interpreter the abovementioned Gerónimo Hernández, and we signed it in our names on this same day, month, and year abovementioned.

[signed] Rodrigo de la Fuente Sanct Angel. Gerónimo Hernández

A Very Particular Description of the Mountain and Mines of Potosí, and of their Quality and Workings

Relación muy particular del Cerro y minas de Potosí y de su Calidad y labores, por Nicolás del Benino, dirigida a don Francisco de Toledo, virrey del Peru, en 1573 (fragment of an account with preceding letter, also in BN Madrid Mss. vol. J.58, ff.26-32.

Most Excellent Lord:

Your Excellency has ordered me, most curious prince that he is, to make a report of the mines of the mountain of Potosí, and according to what I have been able to understand, so that with it and according to the model that by decree of Your Excellency it is made, one may better understand the beginnings, propriety, and basis of it; a sure thing, Most Excellent lord, that I have been placed in admiration in considering that an understanding so profound and an intellect so high, chosen in Spain by the Royal Majesty among so many princes and lords for the government of these kingdoms, to order me, who has it so low among so many and so exalted as there are in this court, wise and well known favorites of Your Excellency, a business such as this. Much more so being born Italian, in that most ancient and renowned city of Florence, so distant from these kingdoms, from where I was exiled from my parents without wanting to do it, for fleeing in my tender youth from that very great division there was between that senate and the most illustrious house of Medici, with which in sanguinity I am so close, by whose factions so much blood has been let in past times. And I take it as a happy outcome and the result of special divine grace to have given me the fortune of being able to make my own fatherland that of the Spanish nation, subject, first, of the Royal Majesty of the most Christian emperor don Carlos and succeeded by don Felipe, his only son, princes and natural lords of these kingdoms and many others so powerful and renowned in all the world; in whose service for more than forty-two years now have I fought with my all, serving them with the fidelity that is owed to such powerful and Christian kings, although my efforts have been short of my will; such that all these causes disheartened me in such a manner that it did not seem right to take up the pen so uncertain of getting it right, whose spirit returned knowing the favor that I received of Your Excellency in ordering me to do it. And now

that it is done, I have had another suspicion that has caused me great fear and I have been anxious thinking of reasons sufficient to excuse me from presenting it before such high and most excellent royal authority; and now that I do it, it is with all the humility I could manage, and thus I plead humbly that Your Excellency receive it, and if I have erred in doing it, for going on too long and being prolix, it is caused by considering that Your Excellency wants to use it in order to give news to His Majesty, and beyond this, to communicate with princes and lords, most illustrious debtors and friends of Your Excellency; and so that for that one may choose from it that which serves, as princes are accustomed to do from among the flowers of their gardens, that with that and with the model it would be sufficiently understood; and in remuneration for such a tiny service and from the great desire I have to do greater things in service of Your Excellency and in dealings of greater importance, I only hope that among the abundant mercies Your Excellency count me among the number of faithful servants of your illustrious house, the same which may Our Lord preserve and make prosper for many years with increase in subjects. In La Plata, 9 October 1573. Most Excellent lord. - I kiss the feet and hands of Your Excellency - Your humble servant, Nicolao de Benyno.

The mountain of Potosí, most excellent lord, is seated in the highest constellation of these kingdoms, between the city of La Plata and the site of Porco, ancient mines discovered and ordered to be worked by the Incas, lords that they were of these lands, six leagues from the said site and eighteen from the said city. It is at twenty degrees [south latitude], a most frigid and exposed land, and so sterile that in no less than twelve leagues around, at least, neither plantings nor trees yield any fruit; but it is in a good district to be provided with necessities, although the ports are far away, the nearest being some ninety leagues, and due to the population of Potosí of Spaniards and natives, it would be supplied with the greatest difficulty and cost had God not provided a remedy, which is by way of carriage with the livestock of the land [llamas], because since there are so many it is sufficiently supplied and with great ease, as Your Excellency must already have understood. The mountain has a height of half a league and is quite steep and rough to climb, and in climbing it one is short of breath, not only humans but also the beasts and cavalcades, and thus they have been seen to be much winded. It has a circumference of a league; in all its height it is live rock and only on top does it have a covering of earth, which at one stature or two, or a little more [depth] one finds the firmness of it, which is why it was at first difficult to discover the mines. It has a most beautiful aspect, and with being placed among many other mountains and surrounded by but separate from them, it has the advantage over all, and only on the western part does it have connected to it a flank of a low cordillera; such that due to its being of this form, it has resulted that in the mines worked thus far they have not encountered the least water, very great impediment for the working of mines. And aside from this, on the north part, at the foot of it there sticks out a little pointed mountain the Indians call Guaina Potosí, which means to say something like 'his eldest son.' It is not too high. And lastly, it is located in the land of the Charcas Indians of the Chaqui faction [parcialidad], old Indians of the encomienda of Gonzalo Pizarro, and entrusted to him by the Marquis his brother [Francisco], governor that he was of these kingdoms and discoverer and conquistador of them.

After Gonzalo Pizarro left on the expedition to the Land of Cinnamon, where he had gone while the marquis, his brother, was still alive, in order to discover that land on the shoulders of the governorship of Quito, from which he returned in the year 1542, when in that time these kingdoms were governed by Licenciate Vaca de Castro, sent by the Royal Majesty of don Carlos, our lord, of glorious memory, after having passed between him and Vaca de Castro some things in the city of Cusco, which it does not seem right to treat of in this report, he retreated to this province of the Charcas and to the city of La Plata, where he had his house, along with some friends who had gone out with him on the Land of Cinnamon expedition, where for most of the time he was in the village of Chaqui, which is four leagues from Potosí; and as Hernando Pizarro, his brother, held in encomienda the allotment [repartimiento] of the Chichas and a very rich silver mine in the mountain of Porco, with the powers of attorney that he had from Hernando Pizarro he had all of it as if it were his own, and thus he went back and forth many times to the said site, and he always passed alongside the mountain of Potosí, as it was right on the path from the city of La Plata, and there they would ordinarily stop due to the abundance of game there was, of partridges, deer, and guanacos, going out as they did to hunt them.

And as this province at that time had fame for having in it rich mines of silver, because of those of Porco, Gonzalo Pizarro sought them out with much urgency, both by way of Indians as by way of Spaniards and their servants who searched for them; and going along in this it came to his attention how on one flank of the mountain of Potosí, on the western part, there had been discovered some veins of silver ore, and later he went to them, and seeing them he ordered that huts be made there and stayed there and brought the trappings to work them and to smelt, where they worked for a certain time and the ore they found was of little or no value; on whose site even today there appear the high, thick walls of the buildings they made, which are those Your Excellency will see from the heights of the mountain of Potosí. And while Gonzalo Pizarro was engaged in this labor, going and coming to it, there came about the dealings of his rebellion, from which he left with his friends he had with him to the city of Cusco, where he committed the crime of that rebellion, as Your Excellency must have full report, and the labors of those mines ceased until today, since they were a thing of no profit, no person has worked them since. And this was the first beginning from which this illustrious mountain became known, although by that it did not acquire the least reputation for richness, because up until then there was none.

The uprisings occurring afterwards, of which it does not seem appropriate to treat, beyond that Gonzalo Pizarro being in Quito during the year 1545, and being in the site of Porco one Diego de Villaroel, who was handling the business of Captain Diego Centeno and had some *yanaconas* and among them one who was called Chalco, native of the Jauja valley, whom I knew and who died not many years ago in Potosí, this one, going about in his adventures or hunting, discovered the vein called Centeno's, of which the said Diego de Villaroel made registry, and it was called by this name because Villaroel registered in that vein a mine for the Captain Diego Centeno. There was later found in it much ore on the surface of the land, and on that there registered many persons who were present and those on behalf of others who were absent.

As word spread of the discovery of these mines and of their richness in the site of Porco. where at that time there were a few Spaniards, some of them set out to discover others on the mountain, sending their *yanaconas*, and others going in person to it, and within a few days one Pedro de Fuentes discovered the Veta Rica [Rich Vein] and made registry of it, and many staked them out according to the order they had at that time, which was not based on so much reason as it has later had, as time and experience have given rise to ordinances for it; yet although these have been in place they have still not been so clear that there has not been need of much better order and limits, which upon understanding them Your Excellency is now ordering them reformed. This vein they named, and it is presently called Rica, with good reason, both for the great abundance of ore it has had as well as for being the richest there has been and for this vein running much longer than any other. They found the ore in it at a very shallow depth, because all who were present say that in many places it was found at knee depth, and in great quantity and very rich, and in places, pulling up straw, from their roots hung some 'potatoes' of the fatness of a nut or bigger of an ore called tacana, extremely rich; and from many I have learned and come to know a marvelous thing, and it is that from the diggings that yielded the discovery of this vein all the way to the crown of the mountain, it runs straight, where later the vein appeared to go as a little hillock of earth more than a stature high, which Nature produced in the form of a ploughed furrow-hump, which revealed the whole vein, it seeming as if that ore wanted to spill out, and it clearly signified that there lay the richness that was later seen, from which there came so much silver as is notorious.

The business of the discovery of the mines being in this state, Captain Diego Centeno, in the city of La Plata, seeing the rebellion of Gonzalo Pizarro and the great scandals that were taking place in the kingdom against the service of His Majesty, in the said city and being a justice of the peace [alcalde] in it, killed Francisco de Almendras, who was placed there by Gonzalo Pizarro as his lieutenant, and he proclaimed in the voice of His Majesty and gathered all the people of the province in order to resist the force of the tyrant, as he did, to which cause all, or the greater part, of the people who were at the site of Porco capable of waging war, he ordered gathered, and many other persons who had been drawn by the fame of the discovery, which was why at that time not much work was done, although from diverse parts there came many people and all for the gain they hoped for; and the works they did were no more than for each one to snatch whatever he could of the rich ores left by the absence of their owners, who were engaged in the service of His Majesty, and others off taking care of their business affairs. And going about in this, one Juan Sánchez discovered the Vein of Tin, and he also made registry of it, and it was called by this name because the ore from that vein had a tin alloy, for which reason no one could profit from that vein for many days, as it was quite difficult to refine, and it was thought to be of little value and much cost.

And in the space of a few days, one Rodrigo de Benavente discovered the Vein of Mendieta, being a youth of sixteen, and it was called by this name because after being registered and staked out by many persons, the mine of the discoverer [i.e., the initial claim] fell to Lope de Mendieta, then a householder in the city of La Plata, by purchase he made of it, the same which had a great sum of ore, and so rich that it was as marvelous as all the rest of which has been treated.

These are, most Excellent Lord, the four principal veins of the mountain of Potosí, and from which has issued all or the greater part of the silver that from that time until today has been taken out of this mountain. And because the other veins are not so famous nor of much importance, although in some there has been much profit, since no one remains to give a report, in the next chapter I will offer a brief record of them in this manner.

Towards the western part, a bit off to the north, there was discovered a vein called Oñate's, which, although it has yielded some profit, it has been in such small quantity that it need not be noted among the esteemed. And a little farther on, and lower, towards the west, there have been discovered and worked certain mines in a little nipple of the mountain they call San Juan de la Pedrera. And in another part, towards where the sun rises, another vein was discovered by Francisco Lobato, which has also had profit and silver has been extracted, but not in such quantity that one would have to give it much value. And lower down, along that same stretch, is a vein named for Licenciate Polo, as he was the discoverer of it, the same which has had much and quite rich ore. And on the backside of the mountain, towards the south, there is a vein named for Cristobal López, and another they call 'Of the Flemings,' and another called 'Of the Blind'; this one is taken for the best, for having extracted from it very rich ore, and many people judge it to be the Veta Rica, just corresponding with that side. There are many other veins in the mountain and in many parts of it, high and low and on the flanks, but I make no mention of them as they are of little value and I take them to be of little or no yield.

After this discovery took place, the fame of it ran throughout all these kingdoms, and many persons, separating themselves from the wars and tumults of the land, diverted everything they could from that and came to these mines and all of them sought to bring people, Indians and *yanaconas*, and many caciques as much from this province as from that of Collao and from other parts [all] sent Indians to settle that site, for the great profit that followed from it for them, such that in a short time there came to be a substantial population of *yanaconas* and Indians subject to caciques, and likewise of Spaniards; although, with Gonzalo Pizarro being in Quito, he heard that Diego Centeno had killed Francisco de Almendras and followed the service of His Majesty, and he later sent Francisco Caravajal, thinking he would take the advantage and conserve his opinion, and as Caravajal was coming from so far away and mustering people, when he arrived in this province he discovered that one Alonso de Toro, who in Cusco was a lieutenant of Gonzalo Pizarro, had come to this province to resist Captain Diego Centeno; among whom, and later with Caravajal there occurred many engagements, and all retired to Potosí to regroup, because, with the fame of the richness of the mines, there were gathered there considerable supplies and merchandise and many people seeking to enjoy profits from silver, and on several occasions the captains of the tyrant entered, and on others the servants of His Majesty, and every time this happened it was with great damage, because they took the people, plus the silver and supplies and merchandise they found; and in that time the silver one could extract was so great that one took it for the most certain thing in the world that nothing like it had been seen, for which reason silver was taken as a thing of scant value.

It occurred later, after many incidents having to do with the tyranny of Gonzalo Pizarro had passed and occurred, that there came to this land the Licenciate Gasca, sent by the Majesty of the Emperor, our lord, the same who put an end to his tyranny and had him defeated in the valley of Xacxaguana and punished with all his henchmen, and all these kingdoms placed in tranquility and reduced to the service of His Majesty; and since all the land from Quito to this province was allotted by President Gasca, all or the greater part of the caciques and householders, both from this province as well as that of Collao, Cusco, Guamanga, Arequipa, and other parts, sent many Indians for the development [beneficio] of the mines of Potosí, and likewise many soldiers of those who had served His Majesty, the same which brought many yanaconas whom they had acquired in that expedition, and it was in such a manner that within a short time Potosí was quite populated with Spaniards and natives; and the silver that flowed in that town was, as they say, as if something from a fable, the stuff of dreams and all taken for incredible.

And with this wealth so great and never before heard of, it was great the reputation and esteem that the mines had, and very great was their value, to such a degree that a great many portions of the four veins were sold at much elevated prices, such that there was a section of fifteen yards in the Veta Rica that was sold for 18,000 pesos; and everyone who could buy a portion in them did so, from twenty yards to fifteen, to ten, even five, and those who managed to have one thought they had an entail [mayorazgo], and they were not deceiving themselves, because if the ore lasted according to what they found in that time, there was no price you could place on what a mine could pay; and since later it began to come to a decline, there arose many lawsuits over the veins and sales of them.

[NB: from here forward the manuscript is damaged, with missing sections marked by ellipses. Coming, then, most Excellent Lord, to treat more specifically of the working of these mines and of other things touching upon them, I say that as I have noted, only four principal veins...as of Potosí, which is the Centeno Vein and that of Tin...the Rich, which, as I have said, has always had great advantage over the others, both in the girth of the vein and its extent, as...rich, and it is clear the other three have also been... do a ella. This vein runs north-south very straight...rising of the sun, such that from where it comes up to where it goes down it bathes it. And although the ore was quite heavy and of...all equal, in some parts it was quite rich and very thick...and in others quite narrow and not so rich, and thus it varied in twenty [?]...rida in many ways, and in part it had, and I saw it, nine [yards] of ore in width, so rich, that of five parts, four, according to what was later discovered, were of silver; and in some places that I knew, many people affirmed having seen thirteen feet of this ore, which to know it in that time as is now known, it was not much the amount of ore that the Indians weighed out to their masters, fifty and 100 marks, from which today they would take out 30,000 or 40,000 pesos; and I will not go on with this anymore so that it will not be taken as something from a fable. And the Indians also were not as skilled in the refining of all that as they are now; but with all this it was inestimable the profit they extracted, and even if one takes into account the greatly excessive expenditures the Indians had to make in that time, which was a thing to take as incredible, because with a jug of wine being valued at that time at 100 and 150 pesos, and a barrel of conserves 40 and 50, and a blanket and shirt this and much more, and likewise all the supplies and commodities, yet without complaint and with such great abundance

and liberality they bought everything on account, as they do today but only with the most tiny things that are sold in the square, a thing never seen or heard of in any part of the world.

The Tin Vein runs almost the same course, North-South, as the Veta Rica, but it ends up much more to the West [poniente]; from the head part it drops down to the southwest, and from the part where it begins it drops down to the northeast. This vein, after the refining of its ore was known and understood, which was most difficult at first due to the alloy of tin, was held in great esteem, the ore of it being most rich, but it has been narrow and only the yolk [yema] of the ore, when it is found, has been and is of value, and it does not have and never has had any type of llampería [loose, silver-bearing material], and the ore is born of a type of bedrock so hard that it has been and remains very difficult to work and of great cost in tools; and as I have said, that vein is so narrow that in many parts of it a person can barely get through. I have discussed all this, Most Excellent Lord, so that Your Excellency may understand the difference there is between the mines that are separated from where the sun rises and of the North-South trend from those that are with the Veta Rica, to which I attribute this great variety.

The Vein of Centeno is much closer to the Veta Rica and runs the same course, North-South; but it is somewhat more detoured from where the sun rises. It has much ore, and very rich, but it does not...run with as much space from above to below, and it had roughly the same...s as the Veta Rica.

The Mendieta Vein is better p.... of the sun than all the rest, but it runs a different course...starting from there it already goes trending towards the north, it goes somewhat c... and going straight along that way it trends toward the south...[in terms] of length it is second only to the Veta Rica...and it is a very rich and wide vein; but the best part is... aside from the 'discoverer' and the mines associated with it, they have been quite poor in ores, although in some parts there has been great fortune.

It is a notable thing, most Excellent Lord, that of these four veins the best part of them has been in a certain place that, it appears to me, was in the very center [en el comedio] of each, because running along the upper part of them towards the south and along the lower part towards the north, what dropped down most toward these parts was less ore, and much poorer. And of this we have special experience, because the Vein of Centeno dropped down so much along the flank of the mountain, its ore always diminishing in such a way that it came to change into a rich galena; and thus there have been so many varieties that many times while pondering it the people who understand it lose their judgment and understanding of them.

Up to this point, most Excellent Lord, these past chapters have treated the beginnings of the discovery of this mountain and of its veins and mines, and before passing on to give a report of the conclusion of their works and the digging of the adits and other details, it has seemed to me convenient, as nothing remains to say about its wonders, to give an account of that small mountain that is seated on the north part of it, which I said at first was called Huaina Potosí. On the same there have been many diggings, those persons

who were granted them thinking they would discover veins of rich ore like those that were discovered above in the heights, and there are many of them of 12-15 statures [deep], in whose works they found much loose ore in large and small pieces, quite rich, from which they extracted much silver; but all that which they worked was in loose earth, without discovering veins nor the host rock in which veins of ore naturally grow, much less true bedrock. And this ore that they discovered could not be followed, as it was simply loose, and later they would lose it and working on it again turned costly. And thus they continued to the depths to which I have referred until everything was lost, and with this and with the little firmness of the works, being in 'dead earth' [tierra muerta], it was abandoned by all the people that worked them; and others, prospecting with the steeltipped stick [barreta] in hand in diverse parts of this mountain and on its flanks, discovered this type of ore in great quantity, the same which was followed until all of it was depleted. And on this matter there have been many and diverse considerations....sas, considering that this silver ore of l...those formed and founded in firm bedrock...by reason of which there was a scarcity of ore that was found in this mountain...being that it was formed where it was discovered without ju... and others, basing the case with greater...when God, Our Lord, for the sins c....general, that at the time when the waters reached their limits, according to the precept, and...D....how the mountain of Potosí from the beginning of the earth...was blessed with the richness of this ore, and with the impetus...the waters receded, carrying behind it that ore, and due to its weight, which is great, it remained in that place or places where it was discovered, and later, with the passage of time, which was so many years, there formed above it a layer of earth, and the same ore with its humidity purified itself and even grew to the size of those great pieces; to which opinion and appearance I subscribe for the reasons given and because towards that part there drop down the springs of the Rica and Centeno veins, which had the ore beginning at the surface of the earth; but as they are secrets and wonders of the Divine Majesty, the same which are incomprehensible, one cannot arrive at certainty beyond concluding that these are His wonders.

Based on what has been treated, most Excellent Lord, one may now understand the plan of this mountain, the discovery of mines, their courses and the richness they have had in silver, and everything else touching on the wandering veins and the little profit and great number of diggings they have sunk; it remains now to treat the works they have done in them since the year [15]48, when Gonzalo Pizarro and his henchmen were punished for the treason they committed against the service of their prince and natural lord, to which end are stopped all those who, fooled by the Devil, consider or attempt such acts of rebellion and tyrannies. The same which works have carried on until today, which is twenty-five years on, in which all their owners have always gone on deepening these mines, each one in his own holdings, where in the four veins was discovered the riches that have been discussed in various places, from which they benefited very little in comparison with what it [originally] was, which has been sufficiently covered, and it is in this manner: as I said in its place, the ore was not evenly spread over the surface of the land and near it, and the same was true in the following of the works towards the depths, because in some parts in one measured yard of depth it ran very rich, and in the vicinity of this yard, which carried along with it a bit more, more or less, it did not run the same, and thus it went varying according to this order in diverse ways, from great richness to

medium, to little and none; and the most marvelous was that which 'played out in reverse' [jugaba al trocado]...in going deeper one part jumped into another, in a way that...one week towards one part they ceased the vem...borders where there had not been anything...greater quantity, and figured in this way...es Your Excellency what ordinarily happened...res forms of great richness to less...this form and rule was general as...in the lowest and least profitable veins....ran...the work and richness all the mines in general...up to forty-five statures and especially those of the four veins, and in this weight the ore began to diminish, both in quantity and quality, such that in only a few statures' depth one came to lose it almost entirely, the whole veins remaining and extremely hard to work, and always the works were continued, although [in digging down] many statures they discovered little or no ore, so much so that with the passing of time they came to lose everything and they entered into a great drought that lasted many statures and later they began to encounter some humidity, and in it ore, although not as rich as that of the surface; and thus in this way they have continued the works, sometimes losing this ore and other times locating it, in the form of pockets, until today, such that all the mines, especially those of the four veins, are sunk to very great depths, from 100 to 120 statures, although the deepest has always been and is at present the Veta Rica, and of this, most Excellent Lord, my own is of the greatest depth, as at present I have the workings at more than 140 statures, for which reason it is a great effort to carry on with the work, and it is almost impossible for it to carry on, and I as an eyewitness can affirm this as a certain thing, which it is; because the veins going straight as they do, pushed down towards the center, leaving aside the declination made, as I will later describe, and the ladders being where they descend to them in the same manner, it is huge the effort of the descent and climb out, because it is inevitable that the Indians have to remove the excavated ore and waste that results from the works by carrying it out of the mines. because by no means can it be removed in large or small carts nor by any other means; and since all the force falls upon the arms, as the ladders are of rungs crossed through braided cowhide and willow cables, with the grip of the hands and the strength of the arms they climb from rung to rung, the Indians coming with their loads lying upon them, and in this way one may easily understand, even those persons who have not seen it, the excessive labor that in this work comes to those who do it, although the Indians are so agile and free-moving in them that they do it, it seems, with great liberality, and it is great the merriment that they bring among them in the works they do.

These veins ...surface of the earth go dropping and declining...the greater the richness of them, the more they carry...[some] drop a lot, and others less, and others are more...dropping towards the west, but when...causing the lack of ore and poverty of c...being the natural course of the declination toward the sun, and so much...on and richness of the ore. I have treated, most Excellent Lord, all this...first, so that one may understand this marvel, which is truly great...because it is understood that there is no instrument of ore carts and po...may remove the ores and tailings outside as a result of the [variety of?] the steep angles, by which the works have perforce been made, so it has been necessary that it be done in the form and manner that is here described.

The mines being sunk to the depth which Your Excellency will have understood, it is impossible to continue the works from the surface where their laboring commenced, and

thus it was necessary to provide another order and plan for working, and thus it was that I, as Your Excellency understands very well, in the year 1556, and at the beginning of it, considering that these mines had of necessity come to suffer this difficulty and inconveniences, I began in company of other persons, neighbors of my mine on the Veta Rica, to open an adit or cave in the flank of the mountain across from where the sun rises. directing this work straight into bedrock, following the course East-West, which direction is contrary to that which the veins run, carrying it north-south, such that following the work by this contrary direction, East-West, it comes to cross the Veta Rica, which by no route can one err. I began this work so low on the flank and with a certain declination since I found the mountain was not disposed to allow it to be done in another way, such that when it came to encounter the Veta Rica it would be at more than 170 statures' depth, leveled from the start of the work from the surface, and by it one would commence, as if from scratch, a new work on this Veta Rica, entering by it; and not only would one be able to work my mine and that of my companions, but also many others in our contiguous stretch and from section to section by the vein above and below, with the greatest facility.

And also by it one could pass ahead in a short time to catch the Centeno Vein, and also the Tin, and have in them the same effect of the work as the Veta Rica; the same which is impossible to do from above without opening another adit on the west side, which for the rough disposition of the mountain, it would be a most difficult work and quite most costly, and finally, that even in fifty years it would not be finished. This work runs eight feet wide and the same high, as Your Excellency has seen, who as prince and curious lord, entered into it, as I understood it, with great contentment, I lighting it, as a result of the darkness, with a taper, giving an account and explanation of the work, as Your Excellency was served; the same which work is so close to the vein that it appears to me no more than ten statures from it, but the bedrock is so hard that it cannot be worked [i.e., penetrated] in two years, a thing whose resistance left, I believe, and with much reason, Your Excellency astonished.

This work, most Excellent lord, has 16 [or 17]...we have spent more than 30,000...as I have said, has been extremely hard, and in...because of that I have come to great necessity...some years at times entirely without labor, which with...certain persons, the same which continuously...as I have always been present and fr...and understood what matters with desire for what must be done [?]...my all the work and the greater part of the cost.

They have opened other adits later along that...of the sun, and some of them they have abandoned and others they have followed and continue to follow, as with the one of Rodrigo de Sojo and another of Captain Juan Hortiz de Zárate; but these are more shallow and lead to the mines much higher up, where they are not of such benefit, although at that level in which they run they do. Others have been opened on the western part, directed toward certain veins and toward that of the Tin, and they are also shallow and of little effect, and their owners have also abandoned the working of them, I believe due to their great cost and small outcome. Another adit on that western side, much lower than all the others, of better design, was ordered by His Majesty to be worked by the

Marquis of Cañete, but since that part of the mountain's flank juts out a lot, after the death of the Marquis it was taken to be a long project and one taking much time...having worked it ninety statures in, more or less...bra, as I understand it, by order of the Count of Nieva...many persons who understand these works, it was...being a royal project, which going on for as long as it could...and due to the interest that from it could follow in discovering...are hidden without revealing the veins by it...in that part seeming to be many, as for...mountain or have springs of water, by it one could...to work all the mines that may be impeded by this...cio of great importance and much benefit.

....the works and perpetuity of the mines of this mountain....of these adits, it being so great the depth of the...impossible to be able to follow except by them, for the reasons that...and above all mine, being the deepest, where it is understood that there is to be discovered and extracted much wealth and in case it is not found upon arriving by it at the Veta Rica, with great ease of labor in a brief time one may dig down twenty or thirty statures, where the wealth of this mountain is thought to lie. And as I have treated of it so much up until now, it may be appropriate to treat a matter touching upon the ores, of great importance, about which there are doubts and different opinions, according to...one may distinguish if this ore, for the...in the veins, as has been declared, if below...will be treated in the next chapter.

Many...one from another, Most Excellent Lord, have been between...mines, especially in the mountain of Potosí, regarding...the varieties they make, because some...ore does not...penetrated below towards the center and that ta...of the surface of the earth, as a thing that grew p... of the rains, of hails and snows that fall from it...ordinarily from the mountain, and more so from the virtue of the planets...adding to the fineness of these ores, and they say that all...era that enjoyed these humors and planets, penetrating from...the work heading down because there would be found the riches, which apparently seems to be true, but as this was lacking with the distance of the depth, that the ores ceased, and with this they conclude that there was an end and they terminated.

Others say that they affirm what the first ones said in that the richness came from the causes referred to, that this is true; but beyond that this business has another greater foundation, which proceeds from below and from out of the center upward and that in that place they have their stump or root stock, and found it in this way: that the fruit of the trees proceeds from the virtue of the roots, and these are in the part below...whence comes the fruit above, which is contrary to the order...this virtue of the branches to these roots, and...secured and they were created by God in the manner of trees that...we have great experience in that they are thus, for having seen it [?]...in this mountain, such that in sixty statures' depth...it is seen that another is born, the same which comes to detour climbing upward...came to respond following the surface of the land, some distance from the other, and this was the mine of Francisco Lobato, and I...we have seen it in other parts, wherein one may deduce...much greater depth in one vein than in another and yet another...it could come to incorporate all in one and h...them; and this also seems likely, as all touch upon...same direction, varying little in that. Such that being thus...or branches that proceed from the strength of the root stock as we have said.

Beyond this they give another opinion that seems sufficient, which is to say that the mountain of Potosí is very high and since it is, they divide it in three parts, which figure in this way: the first third they make out as fifty or sixty statures from the surface; it was the first part that enjoyed the humidity and virtue of the plants; this part was very rich; but so many more statures, which was the second third towards the depths, where no...this virtue was sterile and of little...great dryness that we saw it had; but it was...below, where it began to return to catch this humidity...in greater richness than that before and would be...

To this opinion, Most Excellent Lord, they may arrive at...greater opinions, to which I add...I wanting to give my opinion in that and more to...and it is as I have referred in another part...inasmuch as it has in height it is a rocky outcrop covered...very thin, as has been said; since if these veins grow [?] them...ra opening it from the surface and taking from this...from these veins and following along toward the center and so enter...locating the Veta Rica in my mine at more than 140 [statures]...at...and encased in its bedrock so firm and so beautiful, one has to understand that God Our Lord formed it for a greater secret, because if this were not so, when the ore played out, likewise the vein would play out and the bedrock would close up.

All that treated, most Excellent Lord, are opinions, because up to now not a thing of this has been seen with the eyes, and these are secrets of the Divine Majesty, the same who formed Nature and gave discretion to men so that they may develop their opinions that treat upon it, all which will become clear with the labors and the passing of time, the same which one cannot...FIN

Description of the Villa and Mines de Potosí in the year 1603 (anonymous – in BAE 185 1965, 372-85, and start of Hispanic society ms. with accompanying images)

The imperial villa of Potosí was founded at the base of a peak called in the native language of the Indians Potochi, and in so far as can be determined, the etymology of this name is 'great thing,' and with some difference today they call it Potosí. This villa was settled (according to the oldest and most certain accounts) on the 19th day of April, 1545, by seventy-five men who came here from the city of La Plata, and its discovery was as follows:

The founding Indians [i.e., professional smelters] arriving, who in the Indian language are called *guairadores*, who ordinarily inhabited the site of Porco, with food they brought from Cochabamba loaded on llamas, arriving at the foot of this peak, by which passed a road going to the camp of Porco, one of the llamas they brought loaded with food got loose and went high up on the hill and one of the Indians went after the llama and when he arrived where it was he saw on the surface of the ground a great quantity of *gabarros* [tumor-like masses] of very rich ore, full of *anco*, which is lead, and as this Indian, being

a guairador, knew this ore to be so rich, he removed the food loaded on the llama and replaced it with this ore, hiding the load of food, and upon returning to the company he had left, they went on to the site of Porco, where in guairando the ore he had carried, he discovered it to be of great purity and value. And this Indian continuing to come to this peak could not go on without his secret being found out since he was getting so much silver from this mine he aroused the curiosity of the other Indian *guairadors* of the said camp, as much by his eating and his dress as in other things; so that eventually his companions the Indian *guairadors* where he got such ore that it contained so much profit when theirs did not, all of them *guairando* ores from the same mines. This Indian covered up for as long as he could what place he got the ore from until after six months, due to the constant questioning of a big Indian friend of his, he promised to tell him and reveal it on the condition that he kept it secret; and thus with this agreement these two Indians came together to this mountain of Potosi and went on removing ores, guairando them in the site of Porco until they had a falling out, and each threatened the other to reveal it all to their masters, who were in Chuquisaca, and that is what they did; and thus the first Indian, known as Guanquilla, discoverer of the mountain, gave news to his master Villaroel, native of Medina del Campo, and the second, who they called Chanquillo, to his master Quixada, and with this story they sent from the city of Chuquisaca to see if what the Indians said was true, and discovering that their story was certain and truthful, there came the 75 men and they settled the site that today is the Villa Rica Imperial de Potosí.

It should be noted that at the beginning of the discovery of these mines there were no Indians allotted for them, but rather each Spaniard had his *yanacona* Indians, which is to say his pages [criados], the same which removed the ore from the mines and later they smelted it some little open-air furnaces, and hence they were called *guairas*, which is to say 'air,' from which they took some disks of silver of somewhat low purity, and from these disks they gave their masters the daily quota they had already been assessed; and as this one who discovered the mountain gave his quota as had the others of Porco, he had a lot of silver left over, and this he spend lavishly and for that reason all the others took note.

The first vein that was worked and discovered was that which is today called Centeno, on top of which the Indian had found the masses (gabarros) of rich ore, which had fallen from the pointy crags (farallones) that the vein had formed with the smokes and vapors that the ores had emitted from themselves. They placed this name of Centeno on this vein in honor of a Capt. Centeno, who in those days, although he did not arrive with the 75 men, was general and chief justice in Chuquisaca. And so it is today, with all the works long followed on the mountain, one finds no evidence of it every having a wood, even though when they found it they found it much populated with some trees they call quinoa, and from their wood they built the first houses of this camp, and the first were the royal ones, in the same place where they are now.

There also used to be on this mountain much hunting of vicuñas, guanacos, and vizcachas, which are animals very similar to the rabbits of Castile in both fur and food, except that these differ in having a long tail. There were also deer with antlers, and now

not even grass is found on the mountain, not even where you could find the roots of trees, which is what is most alarming, since all of it is a rocky mass with very little or no earth on it, spread over with the tailings from the veins, which are of live rock.

At its beginning this villa was subject to the jurisdiction of Chuquisaca, but it was exempted from it in the year 1561, on the 21st day of November, for 71,000 assayed pesos which went to serve Your Majesty, granting the said location [or villa] along with the viceroy, Conde de Nieva, don Diego López de Zúñiga y de Velasco, the commissaries Licenciado Birviesca de Muñatones and Diego de Vargas Carvajal and Ortega de Melgosa.

Although in its beginning this villa was a mining camp, it is now the second in quantity of householders and the richest city in all Peru. The site where it is based is on the side and flanks of some mountains, which is why it comes to be somewhat uneven. The streets and main area of Spanish settlement runs from east to west and north to south. Aside from the town's main commercial and trading plaza the Indians have many others, and particularly that which they call the Charcoal [market], where the Indians sell all the foods and barter ores. The fourteen established Indian parishes that surround it [the town center] do not follow the same order, as none of the houses has a single one [i.e., market], and they are small and little more than huts. Those of the Spaniards are good, according to the disposition of the land, although most are covered with straw.

The temperature and quality of this villa and its climate is extremely cold and dry, and thus not a single thing grows in it, and if anything does grow it is a few flowers that might give if one takes great care during the rainy season, which is three or four months; and if one wants to plant some vegetables, it is only with great care that the plants grow, but they never ripen.

There are a few plantings of scant importance, because all they yield is a bit of green barley, which never comes to seed, plus a few potatoes, but all of very little consideration. The birds consist of some vultures that sustain themselves on the sheep [llamas] that die while carrying the ore from the mountain down to the town, and a few birds of prey who fatten themselves on the rats, of which (374) there are many on the mountain, and especially some that have four white socks and a white underbelly; and some turtledoves with golden and white breasts; and on the mountain are found some little birds like green finches [verdoncillos]. Inside the mines there are some mosquitoes that arise from the great heat and wetness found inside them.

At the first founding of this villa the climate was so harsh that none of the said things could reproduce, so much so that pregnant women, so to as not to endanger themselves, went down to the valleys that surround this villa eight or ten leagues away, such that they and their infants by miracle escaped; and now by luck this rigorous climate has tempered, so that it is not necessary for the women to leave the villa, and the children grow up so well that there are four or six schools all full of children born in this villa.

With the climate being as has been said, the ground abounds in springs, for which reason there are many wells, in which there is a thing worthy of consideration, and that is that in the highest point of the villa they have the water very high, and in the lowest it is very deep, and in the very lowest they do not find any water, which should be the opposite, as one ordinarily sees.

The water they have is not good for drinking, although the Indians drink it, and if in some part the wells have good water, it is toward the place they call Tiopampa, which is to say 'field of sand,' which it is, and which thins the water and makes it better than the ordinary.

The water one drinks in the villa comes to it piped from a quarter league away to a fountain in the middle of the main plaza, where it is allotted to the convents, jail, and private houses. As this water is so cold all year that one cannot determine its thickness, and in the end it is known that it is neither very thin nor very healthy, being as it is thick and crude. This town site has three springs, which they call 'Water of Castile' and 'of the Flemings,' and these are on the shady [south?] side of the mountain; the other spring is on the flanks of the sunny side of the mountain, below the Berrio Vein, and it is only recently that the Spaniards learned of it, and it is the best of all. Although these three springs are good, since they are on the far side and of low volume they have not brought them [i.e., built aqueducts] to the villa.

Being as it is, as has been said, the quality of this climate cold and dry, the ordinary habitation of the houses, learned by experience, is that the lower parts are more healthy than the upper parts, due to the little humidity they have, and similarly the most healthy season in this villa is that of the rains; and the time when there are more sicknesses and indispositions in town, it is during the dry season, which, since it does not rain, they call – and it truly is – the winter time in this land; and in it there blow some winds, usually from the west (ponientes), which since they come from the area where there are founded some towns called Tomaavis, they call them by this name. These are cold and dry, and thus are not healthy and cause sicknesses like side pains and dryness of the brain, and it is understood that during the time when these winds predominate there are quarrels and tumults in this villa; and yet, it seems that as if to temper the rigor of this season, Nature determines to send some snows that, tempering the dryness of this time with their humidity, make it more healthy.

This villa has on its south side the Cerro Rico that they call Potochi, of a most pleasing form, seeming to be made by hand, and it looks like a pile of wheat in color and shape, although when one sees it up close and walks on it, it is barren and most harsh and does not have the beauty it shows from afar; and for this reason, or because the mines they call *coya* in the language of the Indians, which means to say 'queen,' they call this mountain for its excellence 'Queen.'

This mountain has four principal veins; the first is that of Centeno, and this vein does not cross the mountain like the others, nor does it cut it, as there is another they call 'Crazy' [Loca] that breaks it up and cuts it off, not letting it carry on. The second is La Rica,

which traverses the mountain from one side to another, and on the shady side they call it 'the [vein] of the Flemings.' The third is that of Mendieta, and it also cuts across the mountain. The fourth is that of Estaño [Tin], and it also passes across (375) the mountain, and on the sunny side they call it Black Vein.

Aside from these four there are other veins of some importance, such as the Vein of Onate, which by another name is called San Francisco and La Victoria; the Vein of Santo Domingo Beltran, that of San Juan de la Pedrera, the Vein of Berrio, the Vein of San Pedro y San Pablo, that of Polo, the Vein of Corpus, the Vein of the Old Men, the Vein of Las Animas, the Red Vein, the Vein of San Anton, the Vein of the Blind Men, the Hinojosa Vein, and the Vein of Rosario. And because only these are of some substance and those which at present they work and promise some duration, it is not worth naming the many others the mountain has, in part because they are branches off these others, and thus, although they work them, they are of little consideration and do not last long.

All the principal veins in this mountain, as well as the lesser ones, follow one trend, which is north to south, with some inclination toward the western part, although they find some veins that cross these, but they are few and of little importance.

This mountain has two types of ores: pacos and negrillos. The pacos that were worked first and were quite rich, as they were for smelting, and lasted for some time, until later, as things went deeper, the veins became poorer, such that one could not refine them by smelting; and thus they began to refine with mercury, with which, without any other aid, they removed from the ore the silver it contained, and although they lost a lot of mercury they were able to carry on refining, since the ores were still rich and yielded a quantity of silver; and as they continued the work of the mines, little by little approaching the center, so the ores became still poorer, and the loss of mercury was so great that the refiners suffered notable losses, and this town site was on the point of being abandoned, until they hit upon the invention of iron [iron filings used by refiners], which repaired this damage, such that although the ores are poor and little silver was recovered, they did not lose mercury, and thus the gain was significant although moderated, and for this reason the work of the mines carried on, although always with fewer and poorer ores; and thus, although the iron helped prevent the loss of mercury, there was so little silver being recovered that it was of no benefit, until they hit upon the mixing of *negrillo* [and paco] ores [to facilitate refining], with which they began to repair this damage; such that although the negrillo and paco ores are taken from the same veins, they are of different origin and quality, and the *negrillos* are the root and fundament of the *pacos*, and they are taken to be quite rich but are of such a nature that by themselves one could not refine them, but by adding the pacos to them to help, there has been great improvement in beneficiation; because the paco ores and earths that formerly remained in the mines, as detritus, plus the encasement rock and gangue and little veins that they discover and work, which would yield six *tomines* more or less per bin of these ores of 50 quintals, adding in one or two quintals of toasted negrillo ore, they washed 50, 60, 70, or 80 lbs. of pella [amalgam]; such that one or two quintals of *negrillo* ore commonly increased the pella by 30 lbs.; and although this refining method continued for some time, as it was taken to be good, later they saw its small benefit and the refiners began to approach it

with extreme caution, as although the *negrillo* ore had such great effect, it was so costly that it could not be continued, because as the veins where the *negrillo* was removed were so hard and deep, and most of them underwater, and after being toasted and prepared for placing in the ore washing bin, a quintal was costing them more than twelve assayed pesos, and each bin of paco ores was needing three quintals of negrillo. And seeing this, they hit upon using in place of the *negrillo* a coppery ore, as it was cheap and much more effective than the *negrillo*; such that adding three or four arrobas of coppery ore to a bin of 50 quintals of paco, it was more effective than three quintals of negrillo ore, the copper costing no more than five or six pesos corrientes a quintal; and so (376) they carried on with great improvement in this method; but, continuing on, they saw that it [too] had little benefit, and also that the fineness of the silver they took out declined considerably, and as a result they searched for many remedies to repair the decline in fineness, which was great, and among them was [the use of] lime, which although at first they used only to clean the silver and bring it up to fineness, experience showed that by adding four or six pounds of lime to a bin of 50 quintals, not only did the silver come out fine, but it made the addition of iron to the bins unnecessary; and it is taken for certain that the invention of lime [processing] has benefited the refiners of this villa more than 500,000 pesos.

It has lately been of such great consideration and effect the mixing of copper, much like mercury and iron were in their day, that it is taken for certain that if God had not rescued this villa with this aid by his own hand, this villa would be totally lost; and so that one understands that it was a rescue from heaven, one may consider that all the refining methods that have been developed in this villa have had inventors to whom this villa has given as a prize great sums of money, and this one of copper, despite being so great, has come into their hands at no cost at all, as no one knows who invented it first, and it is taken for certain that by the invention of the coppers this mountain will last many centuries, and they will come to work it all by open pit, as they are already doing; because in the Veta Rica they have begun to work on the crown of the mountain.

And thus, with the great aid of the copper ore, it appears that the royal fifths are increasing and they take out so much silver and all of perfect fineness. One could add to this another reason for the growth there is in quintos and and silver, and that is that the many refiners here all retrieve and refine so many ores that they do not leave a stone on the mountain that may contain some amount of fineness; and thus they occupy many people in searching for them upon the surface of the mountain, which they call pallazo, and although they are old cast-offs and tailings they may yield 10 or 12 lbs., and even as much as 20 lbs. of pella per bin of 50 quintals, all for the small price they have, being bought at two tomines a quintal on the mountain, which with the aid of the copper ore come to yield some 36, 40, and 45 lbs. of pella per bin.

There are two other types of refining, which are of muds and re-washings, which at one time were lost and now with the help of the *negrillo*, copper, and lime they extract much silver. The lamas are the fine earth that from washing these ores overflows from the tub, and these they recover from some little lakes made especially for this purpose, and taken from there dry, the Indians mill them by hand, and these flours being toasted, they

remove from them some mercury, and later they refine them with the copper and lime, just like the other ores, and they wash the bins of 50 quintals at 18, 20, 25 lbs. of pella, such that the lamas come to have the same fineness, more or less, as the poor *paco* ores. The *relaves* are like sand that, when washing the ore, remains in the bottom of the tub, and after being dried they mill them in the stamp mills, and some they toast with the lamas and refine along with them, and with the ores.

The deepest parts of the mines were cleaned last year, in 1602, the corregidor being don Pedro de Córdoba Mexía; and the utility that has followed their cleaning has been great, because it brought about many and very good diggings in them, and before their cleaning there were none. The richest depths cleaned were in the Estaño [vein] and those of the Veta Rica and Mendieta not so much, but the cleaning of them was of much importance, because as a result, with the close attention they gave them, they discovered many small veins.

The utility that has followed from the lowering [of the royally set price] of mercury is well known by all and particularly for the growth of the royal treasury, since formerly they could not refine the ores of the quality now refined, due to their low fineness, mercury being priced at 89 assayed pesos [per quintal?]; and should Your Majesty mercifully grant it to this town site at cost, or at reduced profit, it would be of much greater gain to Your Majesty than there is today (377) in the sale of mercury, because they would then refine all the poor ores of the mountain, with which Your Majesty would have a great increase in your quintos and in the shared great utility it its benefits, and this would redound in the universal wellbeing of these kingdoms and those of Spain.

The order of the distribution of mercury is to give it to the mine and mill owners with security, and with regard to the discounts, not to do these with the publicity and liberty as was formerly done, and furthermore for the owner of mines and mills who needs a loan in order to refine his silver, and cannot find one among the merchants without great loss and damage, if he needs 20 quintals he asks for 30 and sells the ten, by which means he finances his refining work, and this dealing is commonly done among the same mine and mill owners; but the discounts they customarily did before have ceased, as a result of the decree that was issued, and thus the mine and mill owners go about more relieved, saved from the damages caused to them by the repeated discounts that were done before.

The Indians that ordinarily occupy themselves in the working of the mines, by allotment, are 4,000.

Those who are hired of their own free will, called mingas, are 600.

Those occupied in the cleaning of ores taken from the mines to the canchas, which are some buildings on the mountain where they collect ore, would be more than 400, and they are many and they make a peso a day and some of them more.

Those who occupy themselves in 'palling' [pallar], which is looking for rocks and earth and dross of loose ore on the surface of the soil, including Indian men, children, and

women, who live from this, more than 1,000, and these sell what they collect by loads with a price appropriate to the ore, and it is clearly known that not one of these persons makes less than a peso a day.

The allotted Indians occupied in the mills are 600.

Those working as mingados [free hires] in the mills are 4,000, and some or another make up to 7 reales a day.

The Indian men and women who occupy themselves in refining lamas are 3,000, and they each make a peso a day.

The Indians occupied in bringing ores down [from the mines] on llamas, each llama carrying 7 or 8 arrobas to the mills, are 320.

The Indians occupied in extracting salt and bringing it to this villa for ore refining, by allotment, are 180.

Free hires occupied in bringing salt are 1,000.

The merchant Indians who occupy themselves on their own account in bringing timber for the mills and the construction of buildings on llamas are 1,000.

Those who occupy themselves in bringing firewood for the refineries and to heat the ore bins, between Indian men and women, are 1,000.

Those who occupy themselves in bringing the cocha, which is the dung of llamas, and necessary for heating the ore bins, among Indian men [and women] are 500.

In the recovery of the remaining dung, between Indian men and women, there are occupied more than 200 – for the toasting of the lamas [recovered mill flours].

The Indians who occupy themselves in making charcoal and bringing it to this villa are 1,000.

Those occupied in making candles in this villa are 200.

The Indians occupied in the carriage of the victuals of the villa, including maize from the Frontera de Tomina as well as wheat flour from Cochabamba, Petantora, Chuquisaca, and other parts; fruits, vegetables, fresh fish from the rivers of the valleys, beef, game, hay, straw for the horse stalls, ichu grass to sustain the llamas that normally carry ores down from the mountain, which ordinarily add up to more than 18,000, plus more than 1,500 horses ordinarily found in this town – excepting those occupied in other things, 10,000 [workers].

The Indians occupied in these various said tasks exceed 30,000 in all, although the above sums do not add up to so many, on account of this being a very moderate rendering; and they are settled permanently in their houses, women and children returning there, with another (378) 30,0000 Indians in this villa occupied in diverse employments and entertainments, all those needed or forced, [living in] in fourteen parishes that there are of them [i.e., Indians] in this villa.

There are 4,000 Spanish men and 2,000 women, ascertained by the census of the priests. There are also five monasteries: Saint Dominic, St. Francis, St. Augustine, Our Lady of Mercy, and the Company of Jesus. Fourteen parishes, one of Spaniards, which is the main church, in which there are five curates: three of Spaniards and two of Blacks, which they call 'de las piezas.' There are two sexton-priests (sacristanes sacerdotes). And thirteen parishes pertain to Indians, nine of them served by parish priests, two by Dominicans, and two by Mercedarians, plus ordinarily there are more than 40 clerics who sustain themselves on alms.

There is a hospital in which they cure both Spaniards and Indians, and it ordinarily has some 100 sick and wounded. It has a rent of 30,000 pesos corrientes; it has its pharmacy, physician, surgeon, phlebotomist, and male nurse, plus many black and Indian servants.

There are tribunals with jurisdiction, the corregidor and his lieutenant, two alcaldes ordinarios, two of the Hermandad, a probate judge for those who die intestate, an alcalde of mines, three inspectors for the mountain, a bailiff (alguacil mayor) with 14 lieutenants, three royal judges, two executors for collection of the royal treasury, a receiving judge for sales taxes, three lesser publicans (receptores), two executors, an alcalde in charge of water, and a bailiff for the mountain.

There is a commissary for the Holy Office [of the Inquisition], a commissary for the Holy Crusade, a vicar, a bailiff for the Holy Office as well as three notaries and six familiars, and for the ecclesiastical court a district attorney, three lay district attorneys, and two notaries.

There is an accountant for mercury, plus another accountant for grains, paid monthly by the Indians, and a public defender for the Indians; there is a senior assayer of [silver] bars along with another assayer in the royal mint, which also has its own treasurer, and they coin each year 150,000 marks of silver or more [note says alternative copy says 200k].

There are four public notaries, plus one for mines and one for the royal treasury, and another for intestate estates, and more than 40 royal scribes.

There are forty lawyers, four clerks, four solicitors, three physicians, six surgeons, ten phlebotomists, and three pharmacies.

It is a town very well supplied, all by cartage, as there is an abundance all year, even an overabundance, of hens, chickens, goats, and vizcachas.

There are fruits of the land and of Castile; the grapes last 8 months and at times they bring them from Arica, which is 100 leagues away; and when there are no green fruits, there are apples brought from Cusco, which is 190 leagues away, from which they also bring a great quantity of sugar and many types of conserves; and from Lima, over 300 leagues away, they bring fragrant waters.

The many stores ordinarily stock salt fish from the sea, and despite being 100 leagues away from it, they also bring fresh fish without salt. And likewise they bring from the province of Collao, more than 130 leagues away, some fish they call *zuches* [suchi], without a grain of salt; and so that they are not damaged what they do is, after taking them from the lakes in which they grow, they put them on ice overnight, and the ice preserves them from corruption during the time it takes to reach Potosí. And despite the fact that the land is so cold, such that there is no orchard for ten leagues around, there is always a great abundance in the plaza of limes, oranges, and at times a great quantity of thistles, melons, and bananas (379) brought from over 80 leagues away.

The main church of this villa is adorned with very fine silver lamps, among which is one weighing over 400 marks, and it is so finely worked that it cost 12,000 pesos, which is to say at 30 pesos per mark.

There are in this place 80 grocer's shops, according to the account book of the publican who collects the excise, and in them there is a great deal of spending.

There are 25 stores belonging to Indians that sell hats, of which many get used up [and thus commerce is brisk], both from Castile and from Lima, and made in this place, and as the merchants of them are Indians, it is impossible to know the quantity.

There are also 700 or 800 men, more rather than less, who are idle, and whose occupation is ambling and gambling, and there are 120 women, [respectably dressed] in shawls and petticoats, who are openly known to occupy themselves in the amorous profession, and there are a great many Indian women who occupy themselves in the same business.

This town has a huge expenditure on wood, such that the amount consumed cannot be determined, as there are so many dealers in it; but so that one may get an idea of how large the expenditure is, I will say that one beam that they call an axle, which is 22 feet long and two-feet square in width, is worth 900 and even 1,000 assayed pesos; and a beam they call a mortar [for crushing ore], of the same width but ten feet long, is worth 400 assayed pesos, and a beam they call a mallet, two and a quarter yards long and one palm wide is worth 14 pesos; and an ordinary plank 10 pesos; and following from this one can imagine the great expenditure there has to be in wood for the 128 stamp-mill heads there are here; leaving aside all the houses of Spaniards with their doors, windows, and recessed cabinets of cedar, most finely finished in every way. And the ceilings of the houses are of some staves they call agaves, which although hollow inside are incorruptible, and are three or four yards long, and about the thickness of an arm, and each one is worth 4 reales.

There are six confectioners shops and six of pastries and twenty houses where they make food for many people, which for 30 pesos a month they provide food for a person which is [mostly] meat and fish.

There are more than 100 women's houses where they are occupied in laundering clothes, and it is a lucrative thing and they have much to do, as they pick up and to wash and starch a flat lace collar at 4 reales, and any fancy one at 8 reales.

The quintos alone of this villa, plus the one and a half percent of assay fees (cobos), are worth to Your Majesty 900,000 pesos a year, and this is mentioned for its great size, as last year, 1602, they extracted from the mountain 4,262 quintals of clean and pure silver, ascertained by the royal account books, and since then they have taken out more.

There are above 100 men on the mountain who are occupied as mineros [mine overseers].

Along the creek through town there are 83 stamp-mill heads, and in Tarapaya 42, and in Tabaconuño 3, which makes 128 heads in all. Each head has 7 or 8 mallets, and some 10. Each head mills between day and night [i.e., per 24 hrs.] 150 quintals of ore; and the water that powers the stamp-mills in town is rainwater recovered in nine man-made lakes; and until the year 1601 the water in these lakes lasted 6 or 7 months, and since then it has lasted almost all year, as they have added 3 lakes to the 6 already built, which makes nine lakes in all, and with the water added from the added ones there will be enough for the whole year. There are occupied (p380) in each of these mills two or three men [as overseers] and in some, more.

The mountain has a tremendous infinity of veins and each day they are discovered, the same which is measured from its crown [down] to the Guaico de Santiago, which is the best place for measuring it, and it has been found that it falls from the crown to the said Guaico 11 cordeles [a surveying unit], and each cordel measures 168 yards, which makes 1,848 yards of drop; and the same crown of the mountain has a circumference of two cordeles of the said 168 yards, which makes 336 yards; and its circumference was measured at its foot, measuring it from the top of Huayna Potosí, and they found 28 cordeles of the said 168 yards, which makes 4,704 yards, which according to the reckoning of those who understand [these things], is a league and a half; and its diameter is 1,498 yards. And upon the crown of this mountain there is placed a cross; and one could truly say that the base of this cross is worth more than a 100 million.

They make each year in this villa such an infinite amount of chicha, which is a drink the Indians imbibe, made from maize flour, that it is an almost unimaginable thing, much less to count and determine the quantity produced; and the means of figuring out the true quantity they spend on it is done in the following manner: There arrive in this villa each year 50,000 bushels of maize flour used only for making chicha, and from each bushel they figure that they make 30, 32, or 34 jugs of chicha, and that from the average bushel one gets 32 jugs, all the chicha that is made from the said 50,000 bushels of flour equals 1,600,000 jugs, and they sell each jug for 8 reales, which in assayed silver makes 1,024,000 pesos.

There are in this villa 28 houses where dough is made, all to sell, and it appears according to the account made that every day of the year they make 250 bushels of flour worth of dough, which in a year makes 91,250 bushels; and they take from each bushel of flour a quantity of bread dough worth 18 pesos corrientes, with each loaf of one pound selling for one real, which adds up for the year to 1,642,500 pesos corrientes; and from each bushel they get 2 pesos, 2 tomines of fine bran, which makes 215,312 pesos corrientes; and for [rough] bran they get 3 reales per bushel, which makes 1,892, 030 pesos corrientes, which in assayed pesos is 1,210,900.

And according to the arrival books of the receiver of wine sales taxes it seems that there enter each year and there are sold in this villa 50,000 jugs of wine, which, at 10 assayed pesos a jug, makes 500,000 pesos.

They kill each year in the slaughterhouse of this villa, according to the book of the one in charge, 4,000 head of beef cattle, which, at 7 assayed pesos each, make 28,000 pesos.

There are many people in this place with slaughterhouses for Castilian sheep, and according to what has been assessed, they go through 1,000 sheep a week, and adding that for the Lenten season, it comes each year to 50,000 sheep, which, at 2 pesos corrientes makes 100,000 pesos, or 64,000 assayed ones.

This place has an extraordinary expenditure on llamas, and it seems that the number of them that come loaded with wine, coca, and other comestibles is some 40,000; and beyond these there enter some 60,000 llamas brought by the Indians who come to do the mita for the mountain, on which they bring 40,000 bushels of food for their sustenance; and this livestock does not turn around and leave, as it is all consumed in this villa, such that all told there are 100,000 llamas, which, at 4 assayed pesos each, make 400,000.

And although it is mandated by law that the Indians not slaughter llamas, it cannot be prevented, and thus it is figured that between herd and pack llamas they kill each year in the Ranchería [Indian townships] 40,000 head or more, which at 3 assayed pesos each make 120,000 pesos.

And as for the shipments of coca that enter this villa, they sell (p381) each year 60,000 baskets, which, at 6 assayed pesos each, make 360,000 pesos.

And as sugar [el dulce] is generally agreeable to all, there are few who fail to eat it, and thus they consume each year some 6,000 arrobas or more, which, at 8 assayed pesos each makes 48,000 pesos.

And no less notable is the taste for food with hot peppers, and as a result they consume each year 14,000 baskets of it, which at 4 assayed pesos each makes 56,000 pesos.

And likewise there arrive in this villa every year 3,000 arrobas of conserves from Cusco, Chuquiabo, Chuquisaca, and other parts, which, at 10 assayed pesos each make 30,000 pesos.

And cane syrup is consumed at some 2,000 jugs a year, which, at 8 assayed pesos each make 16,000 pesos.

There arrive each year from Paria and other estancias surrounding this villa 20,000 cheeses, which at 10 assayed tomines each make 25,000 pesos.

And likewise they sell each year 25,000 little jugs of lard, which at 4 assayed pesos each make 100,000 pesos.

Of hams, bacon, loin, and pork tongue, which comes from Tarija, Paria, and other parts, they spend each year 30,000.

And according to the registry they have made of those who have stores selling jerky, it seems they consume each year 30,000 arrobas of it, which, at an assayed peso and a half each makes 45,000 pesos.

They used to sell in this villa, prior to the ash [i.e., volcanic eruption] in Arequipa (El Misti, 18 Feb. 1600), 600 quintals of raisins each year, and now they do not even manage to sell more than 200 quintals, which at 25,000 assayed pesos, make 5,000 pesos (?).

And according to the entry book it appears that they sell each year 1,000 quintals of figs, which at 12 assayed pesos each make 12,000 pesos.

There are consumed each year 6,000 arrobas of salt fish from the sea, which at 4 assayed pesos each make 24,000.

This place is so reliant on fish from the lake of Chucuito that if it were not available it would be difficult to make it through the Lenten season, as it is more accommodating to the needs of the people, and the Indians are sustained by it, and thus they spend each year on this product more than 30,000 assayed pesos.

And as the cost of fish goes together, I say they have figured that they spend each year on shad, dorados, and other fresh fish 12,000 assayed pesos.

Likewise they consume each year, as has been ascertained a thousand ways, 2,000 small jugs of olives, which at 10 assayed pesos each make 20,000 pesos.

And with the same care olive oil has been assessed, and it seems that each year they consume 2,000 jugs a year, which at 8 pesos each make 24,000 pesos.

And as vinegar is desired along with oil, it would be well to put down its consumption; and that which they have been able to ascertain is that they consume 8,000 jugs, which at 4 assayed pesos each make 32,000.

And as it is of no less consideration the expenditure on straw and hay, it would be well to put down here how each day they spend 250 assayed pesos only on hay and straw, which in the course of a year makes 91,250 pesos.

And in garden vegetables they spend every day some 60 assayed pesos, and this has been ascertained with ease, which in a year makes 21,900 pesos.

And as fruit in this area is available all year, and the bulk of it is sold in the public square, it is easily ascertained that every day they spend 300 assayed pesos on it, which in the course of a year makes 109,500 pesos.

Beyond the 40,000 bushels of foods brought in listed above under llamas, it appears they consume 50,000 bushels of whole grain maize, and this is not a lot given the infinity of Indians there are (p.382); which, without my going on at length about it, I can say with truth that they surpass 120,000 souls, and it is quite certain that there are at least another 120,000 dogs, and they consume more food than even the Indians (?) [que es mas lo que estos consumen de comida que no los indios]. They ordinarily sell each bushel of maize at 5 assayed pesos, which make 280,000 pesos.

And likewise they consume 20,000 bushels of chuño, which is – for those who do not know – a very hearty food, made of something called potatoes, a type of truffle that grows underground, and from there they take them and dry them and then give them this name, chuño; and they sell a bushel for 6 assayed pesos, which makes 120,000 pesos.

And likewise they consume 40,000 bushels of potatoes, which are the same as those mentioned above, and it is the food of the Indians, and even of some Spaniards, and they sell them for 3 assayed pesos a bushel, which makes 120,000 pesos.

And aside from these last foods the Indians have another food that also grows underground, planted by hand, which they call ocas, and are something like carrots, and it is a delicious food and is sold by the bushel, and a bushel costs 3 assayed pesos, and each year they consume 40,000 bushels, which at the said price makes 120,000 pesos.

This villa also has 24 stores selling Castilian [European] dry goods, and according to their books and other assessments that have been carefully done it appears that each year 400,000 assayed pesos worth of silver is spent in them.

And it is of such importance the linen that comes to this villa from Tucuman each year that without it the servile class of blacks and Indians would go about barely dressed; and with this, along with other things brought from Tucuman they spend some 100,000 pesos.

And it is of no less consideration, also to clothe the poor folk and servile class, the broadcloths that come from Quito, Guánuco, and Mexico, grograms and baizes from Guánuco and other parts, such that there is never a year in which they do not spend on all of these together 100,000 assayed pesos.

And they also consume each year 30,000 yards of serge, which at 6 reales [a yard] makes 14,400 assayed pesos.

Beyond the 25 stores mentioned above belonging to Indian hat makers there are 8 Spanish hat makers' stores, and having checked with these, they sell each year 14,000 hats, which at 13 pesos corrientes each makes 182,000 pesos corrientes and in assayed pesos 106,480.

Likewise it seems they consume each year 18,000 pieces of ropa de abasca [an Andean fabric], which at 7 assayed pesos a piece makes 126,000 pesos.

And as for the consumption of cumbes [another Andean fabric], it seems, according to the figure given by those who sell them, that each year 6,000 assayed pesos is spent on them

And as it is such a necessary thing to bring down ore from the mountain in gunny sacks, along with all the foods and flour carried in them, it is clear that there should be expenditure on them, and indeed there is no year in which fewer than 100,000 gunny sacks are used, which at a peso corriente each makes 100,000, and in assayed pesos 64,000.

There are in this villa 28 shoemakers' shops, and according to what they have said, they consume each month 150 dozen goatskins (cordobanes), which yearly makes 1,880 dozen, which at 3 assayed pesos makes 54,000.

Each day, all told, there are consumed in town 60 decks of cards a day, which in the course of the year makes 21,900, which at a peso and a half corriente equals 32,850 pesos, and assayed, 21,000.

There are in this town six master farriers and among them all they go through 72 dozens of horseshoes a week, which per year makes 3,816 dozens (p.383), which at 7 assayed pesos each dozen adds up to 26,700 pesos.

There are four wax sellers' shops, and among them all they consume each year 200 quintals of wax, which at 130 assayed pesos makes 26,000.

There arrive each year from Brazil 450 black men and women, which at 250 assayed pesos each makes 92,500 pesos.

Given the fact that the discovery of lime refining occurred in this year of 1603, they do not use as much iron as they formerly did, and indeed there was not a year in which they

did not consume 4,000 quintals of iron, leaving aside many crowbars and hammers that arrive already made from Lima, Castile, and other parts; and thus, from today forward, leaving aside the iron that comes worked, it will be sufficient for the things that must be fabricated 2,000 quintals of iron, which at 32 assayed pesos makes 64,000 pesos.

Ordinarily, there are 4,000 regular mita Indians working in the Cerro Rico of this villa; [and of] pallares and apires, 2,000, which together makes 6,000; of these 5,000 work with candles, and they spend on them each week 4 reales, which in the course of a year makes 132,500 pesos corrientes, which in assayed pesos makes 84,800.

Likewise they spend in the 60 stamp-mills located along the banks of the city creek [Ribera] and in Tarapaya 6 pesos in candles a week per mill, which in the course of the year makes 14,000 assayed pesos.

In addition to the above expenditure, they consume in the Indian townships [rancherias] each day 160 pesos' worth of candles, which in the course of the year makes 37,376 assayed pesos.

And in the town, between Spaniards and other people, they spend every day 150 pesos corrientes on candles, which in the course of the year makes 35,040 assayed pesos; and in all the expenditure on candles comes to be 161,216 assayed pesos.

And as said before, there are in the town 28 dough makers [bakeries], and checking with them, eight say that they consume 20 pesos' worth of firewood a day, and the other 20 spend 10 pesos, which adds up to 360 pesos corrientes a day, and in the course of the year 131,400 pesos. And in the 6 pastry shops that exist they consume 8,500 loads at a peso corriente each; and certain basins used to refine ore by adding heat also consume firewood, and in private houses they consume 10,000 loads at the said peso corriente per load, which in all is [152,000] pesos corrientes, or 115,136 assayed pesos.

They make each year 27,000 ingots [lit. 'pinecones'] of silver, and to remove the mercury from them they consume for each ingot two arrobas of charcoal, which makes 13,500 quintals; and the people to whom these ingots are handed over consume in the 'reburning' of them, for every 10 ingots, four arrobas of charcoal, which makes 2,500 quintals, and from these 27,000 ingots they make 9,500 bars, and each bar consumes an arroba of charcoal, which makes 2,375 quintals. And among the blacksmiths they consume each week 200 quintals, which in a year makes 10,600 quintals, and among the silversmiths they consume each year 630 quintals, and in the Royal Mint 800 quintals; and the guairador Indians consume 500 quintals, and the folk of the town consume 54,750 quintals, affirming this in visits to two buildings that serve as warehouses, where it is sold by the Indians, who are the lords of this commodity; such that altogether, it appears, 85,655 quintals [are consumed annually], which at 2 pesos corrientes adds up to 137,047 assayed pesos.

They bring down [from the mines] each year, according to the llama drivers, and attested by their books, 2,500,000 (p.384) quintals of ore; and the Carangas Indians, who also

occupy themselves in this, bring down 200,000 quintals, for which they pay an assayed tomín to bring down each quintal from the mountain to the town, such that the said journeys add up to 337,500 pesos.

The ores from the upper sector plus another 300 quintals that are bartered each year are refined in 60,000 basins, mixed into each basin 50 quintals [of ore], and [then] in each basin 5 quintals of salt, which comes to be 300,000 quintals. And in the refining of the slimes [lamas] and other things they consume 300,000 quintals, which at 6 assayed tomines makes 247,500 assayed pesos.

For the refining of the 60,000 basins they give each one 8 rounds, which cost 4 reales each, such that each basin costs 4 pesos corrientes and all of them together 240,000, which makes 153,600 assayed pesos.

There go in the pack train to the mountain 28 [sic] llamas, and there come in each standard mita 5,000 llamas, and for the sustenance of this livestock they expend each day 400 loads of ichu grass, which costs 4 reales. And likewise they consume in the buildings and town works, and on houses all covered with it each day 200 loads, at half a peso each, which each day amounts to 300 pesos corrientes, which comes to 70,000 assayed pesos a year.

For the refining of all these ores they take out of the royal storehouse, as attested to by the royal account books, 5,750 quintals of mercury, which at 70 assayed pesos per quintal makes 402,500 pesos.

For the 60,000 refining basins already noted in this account, they heat them not only with firewood but also human excrement, and that of llamas, called ocha, and with a type of resin they call llareta (yareta), and altogether they consume 800,000 loads in the following manner: the basins consume 80,000 loads, and in the roasting of negrillo ores and firing of the slimes they consume 270,000 loads, and in making chicha they consume 100,000 loads, and in the firing of pottery and bricks and tiles and many clay instruments for the refineries they expend 200,000 loads, and for the ordinary needs of the Indian households 180,000 loads, which all add up to 800,000 loads, which at 4 reales make 400,000 pesos corrientes, or 256,000 assayed.

Of the 6,000 Indians mentioned before that work on the mountain, 5,000 work by decree and 1,000 are 'aventureros' who hire themselves out for 9 pesos each per week, which makes 52 weeks a year, and thus the cost of this Indian labor is 468,000 pesos corrientes; and the 5,000 ordinary mita Indians get two and a half pesos a week; but moderated at 2 pesos a week each according to cedula, it comes to 10,000 pesos corrientes a week, which in a year of 52 weeks makes 520,000 pesos corrientes, and altogether, in assayed pesos, adds up to 632,320.

And in the pack train of the 5,000 llamas mentioned above there are occupied 312 Indians, with 16 llamas per Indian, and each Indian receives for his work each day one peso corriente, which adds up in a year to 59,900 assayed pesos.

By way of summary and total for all the listings of required and necessary expenditures put down in this account, they spend each year in Potosi 8,862,349 assayed pesos.

(p.385) The offices that are sold in Potosi and their values:

| | Pesos |
|---|---------|
| The bar held by the alguacil mayor | 100,000 |
| Chief Assayer | 50,000 |
| Treasurer of the Royal Mint | 50,000 |
| Assayer of the same | 30,000 |
| Lifetime fiel ejecutor | 25,000 |
| Royal Ensign | 25,000 |
| Depositario general | 24,000 |
| Receiver of penas de camara | 14,000 |
| There are 19 offices of 'veinticuatro' [town councilman], | |
| and each one is worth 9,000 pesos, which makes | 181,000 |
| Town council scribe | 36,000 |
| Three public notaries at 20,000 each makes | 60,000 |
| Scribe of mines | 20,000 |
| Scribe for the deceased | 8,000 |
| 4 procuradores del numero at 6,000 each makes | 24,000 |
| | |

The sum and total value of all these offices is 647,000 assayed pesos.

(the document is in tomo 39 of the Col. Muñoz, Biblioteca de la Real Academia de Historia), ff. 240-53. a copy with Munoz's annotation at end, dated 1603, from ms. 'que tiene don Juan Antonio Enriquez, Ministro de Marina, la cual saco de un ms que posee el conde de Aguila. Coteje esta con la de Enriquez, Sevilla, 8 abril 1784.' But it looks like the Hispanic Society doc was continued and ended up in the Academia de Historia's Papeles de Salazar, t. F 3, titled 'Memoria de las cosas de Potosi y grandezas del' – this one needs to be checked against it, as the BAE does in footnotes)

Fray Diego de Ocaña, Viaje por el Nuevo Mundo de Guadalupe a Potosí, 1599-1605

On the mountain of Potosí which is the eighth marvel of the world, as all this mountain is made of silver

After the fifteen days I spent on this trip, and in walking among these mines [of Porco], I returned to the villa of Potosí, of which I will now treat and paint here the mountain as it is, and with the tunnels and principal veins it has, all of which I entered into and walked through; and from all of them I take to Spain from each digging a stone of ore, with precise record of whose mine it pertains to, and of the Indians who go about working and

extracting the ores, and the expenditures associated with them; the mills there are and the order of milling the ores, and the trade of the Indians and the victuals and drink they use. The costume is that of the Colla Indians, because those who most serve the mita of the mountain are Indians of Collao. I will treat a little bit of everything, touching on everything along the way, because to say in full what there is in each thing, it would never end. And so as to do it with greater punctuality, I went to the mountain and spent eight days there informing myself of some things and seeing others. And thus I will say what there is in Potosí, which is the following:

Now, it would be proper to treat of the mountain of Potosí and of the place and of the Indians, and of the things there are and the expenditures they make; and in all the universe I do not believe there is a more marvelous thing than to see a mountain greater than Cabeza Aguda [in the Sierra Morena near Córdoba, Spain] and all of silver, such that there is no fistful of earth on it that has no silver; from which so many millions are carried to Spain each year. And thus as a thing so notable I will paint it with all the veins it has, treating it with absolute truth, because I do not write about anything except that which I have seen and experienced, knowing that no one would admire something that has only been overheard; so I try to be true and if not, I cannot dare to write about it.

On the drawing of the mountain: Cerro de Potosí, Eighth Wonder of the World.

This is the eighth wonder of the world and the greatest of all; as all this mountain is of silver. It has on the lower part in circumference all around, measured with a cord, 11,033 yards. There work within this mountain, every day, 8,000 Indians, all with tallow candles, not counting those who carry out ores, who are another 4,000; such that the Indians who serve in the mines of the mountain, not counting those in the mills, are 12,000 Indians. They consume in tallow candles, which cost a real for four, 150,000 pesos of cash silver each year. And this I took from the accounts the mine owners give of the expenditure on candles, which out of curiosity I verified.

This mountain has, from the part at midday to towards the southern part, four principal veins, which run from the tip of the mountain downward: the first is called Mendieta's, the second Centeno's, the third is called the Veta Rica, and the fourth 'of Tin.' These four veins are worked open cast, into the entrails of the earth, so deep that in one whole day an Indian makes no more than two trips with the ore he can carry out on his shoulders, such that towards midday he does one trip and towards nighttime another. And it should be noted that this one does not excavate the ore, as there is another down below digging, such that he does not stay below longer than it takes to fill a bag in the form of a hide pouch, which he takes out tied to his shoulders. And all the rest of the time is spent in going down below and climbing up using some ladders of staves and rope, such that if he loses his footing he will be dashed to pieces. All the rest of the mines, outside these four, are not opencast, but rather as they are painted [in the missing image]. They have some mouths through which one enters, and afterwards there inside they go snaking, some through one part and others by another, and they enter through one and may exit through another. And they have some parts so narrow that if one is not stretched out on one's belly one cannot get inside, and many times there remain pieces of their garment [sayo]

on the rocks; such that they go along like snakes when they move using their skin, through some very narrow part; and if they should loosen some earth or rocks that fall and close that entrance, the Indians remain entombed, with no means of getting them out, and in this way many perish.

This mountain is very high and very well formed. It only has on the western part a bit of a lump. It is necessary that a mule that must go up to where there is a cross be a very good one; it takes half a day to ascend all the way, and with the heat of the ores the breath is shortened, both for mule trains and for people, and many fall dead underfoot, as I saw a horse whose owner made to climb with some hurry and it fell dead there. **God sustains this machine of this mountain miraculously**, because all of it from below to above and all around, in all parts it is full of mouths, and in the part inside it is all hollow, such that one cannot know upon what it stands or what sustains it. It is a portrait of hell to enter inside, because seeing so many caves, and so deep, and so many lights in diverse parts, and to hear so many blows of those striking with the bar, it is a din that causes a man to lose his judgment and even his senses. There are some great adits through which the veins are connected and worked; and inside, in the crossings, there are some open spaces so wide and later some parts so narrow, sometimes straight and other times heading below, that should the Indian's candle be snuffed out, he will fall headlong.

I entered through the adit of Juan Ortiz to see these mines, so as to be able to write down what I am writing now, so far that it was not possible to go farther due to the narrowness of the place and due to the clothes we had on; where I looked from one part to another and saw so many lights and I heard so many blows that it seemed as if I were in hell. And I asked the minero who went with me how far it might be from where we were to the mouth of the adit and he said two long quarters of a league. And thus I did not want to go farther, and we turned about to leave, and once outside I made a circuit of the whole mountain, and saw all the works and mines there were and from there inside I took out two stones of ore, which I bring with me to Guadalupe as curiosities.

On this day that I climbed the mountain the feast of St. Francis was celebrated, whose chapel is the church that is on the mountain, where they say mass for the mineros. And we went to celebrate the feast with ten friars of the convent of St. Francis; and they served us a meal that could not have been more abundant in Madrid; because in all of Potosí and for twelve leagues around there is not one tree, and in the church there were so many boughs and fragrant herbs and carnations, that as a marvel I put this to memory in order to write about it. There was at the beginning, to commence eating, raisins and almonds from Castile that cost, per pound of almonds, twelve pesos, which is 100 reals. The wine that was drunk was from Castile; with such abundance as could be drunk in Guadalcanal; each jug, which held half an arroba, was valued at a little over fifty pesos of cash silver, which is 400 reals. With fear I write this; but I tell the truth according to the law of the priest and I put this down as a marvel, a great one that it is, where the spirits of men are no less great. As for the rest of the meal I will not comment, as it would be a very long and tedious thing; I say only that there remained so many cakes of marzipan and of sugar that all the Indians left loaded up with food.

They bring the ores of this mountain down on 'sheep' [carneros], which are like one-yearold calves, tall in the legs, and thinner in all their limbs than calves. The sheep would have a height, from the feet to the loin, five long spans, which is almost a yard and a half; the neck is very high, without horns; the head is the same for the males and females, with ears a bit long; the features of the head are the same as a sheep's; the neck has a height of almost a yard no cabal, a little less; the tail is small; as for the neck and in lying down and getting up, they seem a species of camel. The male genitals they have below the belly, like sheep in Castile; but they do not have it facing forward but rather it makes a turn towards the rear like half a shepherd's crook such that when they urinate it goes out between the hind legs, as if they had the pizzle out, because it is great the turn it does; and to mate, the female drops to the ground and rests on her knees. Of the meat of these the Indians eat it, and the Spaniards, too; it is like beef; each of these sheep is worth 80 reales in Potosí, and in other lands whence they bring them, they are worth less. The ordinary mita that exists for the service of the mountain consists of 12,000 of these sheep, allotted in three parts, such that every two months 4,000 serve, and these 4,000 being tired, they bring from pasture another 4,000; such that in six months all 12,000 sheep serve. What they eat is a grass called hicho [ichu], which is like the esparto-grass of Spain.

They carry the ores of the mountain down in some small gunnysacks that would hold a bushel [fanega] of wheat. On these sheep they bring in all other victuals, such as wine and flour and fruits, because each sheep, as I said before, carries a weight of six arrobas as many leagues as needed. And ordinarily they bring the wine to Potosí from Arequipa, which is 180 leagues away. And these same sheep carry the [silver] bars belonging to the king and to private persons that go down from Potosí; and they carry them the eighty leagues it is to the port of Arica in eight days, because they have ready fresh sheep every four leagues. And they walk day and night so that the silver is not detained. And on these sheep the bars for Our Lady of Guadalupe were sent down on 17 March 1601, the same which I sent along with the royal officials who were loading up these sheep, since they go with greater speed than the mule trains; and all this is necessary due to the great quantity of silver that goes down from Potosí at the time of the small armed fleet, which is the beginnings of March. And what was sent down that year when I was there, which was 1601, in one month, that of the king and private persons and only from Potosí, was 5 million, as I saw and was assured by the registry, because as I said before, I do not write except about things that I see and experience.

The site of the mountain is at 20 and a half degrees to the south, according to the height of the sun, not below the same pole but rather to the right of it [en derecho del]; but not so distant that the Southern Cross, which are four stars in a cross, which are those that seem to be closest to the pole, go around the mountain like La Bocina [Ursa Minor] of the north does around north itself, except that this other circuit that these four stars make is much larger, which as our perspective and appearance from here would be half a league; I do not say that in the sky it would be half a league, but rather that what appears to us from here is that distance, which there would be more. Above the mountain of Potosí there are two vestiges, in the heavens, white in the manner of clouds, small in how they appear from here, like a blanket, one a little larger than the other; and these are a

marvelous thing, that move with the heavens and circle around the mountain in twenty-four hours. They say they are consequence of heaven, which they are; because if they were clouds the air would carry them from one part to another, which does not happen, but rather at all times they are fixed, whether there is wind or no. And in other parts of these kingdoms where there are these same signs in the sky there are mines of silver, very rich, such as are those of Porco and those of Chocolococha [near Huancavelica, Peru].

From the middle of the mountain upwards it never rains, but rather always snows, such that all that is water in the town is snow on the mountain. On Wednesdays and Fridays the Indian women climb to take meals to their husbands, and they are so many that they cover the mountain, and they most resemble processions; and if there are 12,000 Indian men, as I said above, those who are working, and all or the majority are married, from here one could take a few more or less women who could be those who climb with meals these days in the mornings; in my view it would be 10,000 or 11,000, more or less. And on Saturday night, from when they play the prayer, there begin to descend all the Indian men of the mountain and all with candles lit, that appear like nothing other than processions of flagellants; and for the Indian men to come down to the town it takes all night and into Sunday morning, as some of the mines in which they work are so deep that it takes them all night to climb out and reach the outside.

And to these Indians they pay them their day wages on Sunday nights, which for each week amount to some two or three ducats. And from Saturday night until midday Monday, there does not remain a real of this among them of all this, both of these who work in the mountain as well as those who remain in town; which if all taken together, according to the census of the parishes, which amount to fourteen Indian parishes, surpass 100,000 Indians. And all that they earn in an entire week they drink up in one day and one night. Because on food they spend very little; everything is drink, both for the men as well as the women, such that all of them get drunk. And it has been discovered according to the accounts of the grocers [pulperos], who are some men who have shops that sell wine and jugs of chicha, which is a drink they make from the flour of the maize they eat, which are those ears [mazorcas] that there in Spain are called wheat of the Indies, they sell in wine and chicha alone 300,000 pesos of plata corriente, each peso being of eight reales, every Sunday. This is the most notable thing I can say about Potosi and thus I put it down; and I would head off anyone who might say or to whom it would seem that I am getting carried away by offering as witnesses so many others who have been in this place who can prove that it is thus.

Of the site of the Indian townships [rancherías] and of the Spanish town in the Villa Rica of Potosí

The layout of the Spanish town is by blocks and streets; and the Indians' houses, which they call rancherías, surround the houses of the Spaniards, such that on every side the Indians have them surrounded such that their houses reach up to the flanks of the mountain. The houses of the Indians are like the pens or enclosures of pigs; some stones placed, mostly in a rounded fashion with a bit of clay, and for the part above with straw, and so low that one can barely stand up. They have no beds nor do they sleep except on

the floor, at best with some skin below. Ordinarily they go about very pig-like with their hands and faces very dirty, such that they do not bath all year; their hair loose over their shoulders and very black; the men wear it shorter, so that it does not go beyond the collar. The Indian women use make-up and that which they apply is a reddish earth like almagre [iron oxide] and they daub the entire face, nose, and forehead, such that they appear to have a reddish mask on. Others use a color that is a little yellowish and they do not apply it except to the cheeks and nose, which to me makes them appear like demons; and with all this they do not lack Spaniards to sleep with them. They are very hedonistic, such that ordinarily they are drunk, and they eat much chili [ají], which there we call pepper of the Indies; they all go about barefoot and very few wear shoes, the whores only and the rich pallas, who are Indian women of better faces since they are daughters of Spanish man and Indian woman; but those who are of Indian fathers are ordinarily all badly ill-featured and very ugly, both the men as well as the women. And they sleep like pigs one with the other; and since ordinarily they are drunk and all mixed together the father sometimes comes to know the daughter and the son the mother; and this cannot be remedied, since they all sleep together and mixed up, one with the other. Their dress is a shirt of cotton or of wool from the sheep of the land [llamas/alpacas], sleeveless, with the arms and legs always exposed, without any other clothing. They do not spend anything on clothing, because that which each one brings, they weave in their houses, such that as much as they earn or bring in, they spend in drinking and eating. And before marrying they tend to spend two or three years in concubinage; and they say that that is in order to prove if they can live together, and in these two years the woman is trying to see if the husband is a good worker and if he is of good or bad condition; and it so happens that commonly the Indian woman has two or three children and later decides she does not like the Indian man and seeks to marry another. And neither can this be remedied, because once the preacher comes to know it, it is when they marry; such that the Indian men do not consider it dishonorable to find their women with others; and wherever they find themselves they lie down one with the other and the priest does not know if they are married or single; and as he is but one man, he cannot keep count with such large Indian villages as there are here. But this is certain: that no Indian woman marries without having first slept and carried on a long time with the Indian man with whom she marries.

And the women tend to run off on their husbands, and later these say masses to St. Anthony asking that their women return. And on the 27th of the month of April of 1601, I being in the sacristy of [the church of] St. Francis, after Easter Resurrection, there came to me an Indian man and he placed in my hand two pieces of eight (which is the standard alms they give in Potosí for a mass) and he said to me:

-Padre, give me a mass for Our Lady of Guadalupe.

And I asking him if it was for some sick person, he replied to me that it was not, but rather for his wife whom he had not been able to locate for eight days, and that he had already said masses to St. Anthony and she had not appeared, and that he did not want to say any more except to Our Lady of Guadalupe. I said mass to him, and even so it did not end, the mirth this Indian caused me all the times he came back to the town, to see him with so much devotion, his hands together pleading with Our Lady to make his wife

appear. I do not know if she came back, but this goes to show how many times the Indian women go off with other Indian men and stay away eight days; and it is given over to masses said for them that it is believed they will come home and when they return, the Indian men give great thanks to the saint to whom they ordered the mass said, and they remain very pleased and they are very tender with the wife and think that it was for some offence they had done to them, and they attempt not to cause them any more offense so as not to spend more pesos on masses. And the women do not leave again only because they are quite hedonistic and the greatest rogues. And along with this they are witches, the Indian women as much as the mestiza and creole ones, who go to search out a man wherever they wish even if he is many leagues away. And thus it happened to Simon de Torres, an apothecary and native of Guadalupe, being in Panama in the year [15]97; sleeping one night in his bed there came down from above through the roof a crash, and putting his hands out to see what had fallen he felt a woman, who got in bed with him; and asking him who it was, he said that it was so-and-so, with whom he had treated in Nombre de Dios, saying that for nothing more than seeing her she had come; and Simón de Torres telling her to stay in Panama for a few days, she said she could not because she had left bread to place in the oven and that she had to go back and cook it. And Nombre de Dios is some 18 or 20 leagues away from Panama, such that in half an hour she would have to return to cook the bread after being with him. This Simon de Torres recounted to me, to whom it happened, advising me to take care with the women of this land; and thus I did not visit with a single one although I was much bothered by very high-ranking women: but these are the worst and the more capital they have, the more vice they procure. And thus in this land, as all things in it are in reverse, this as well is in reverse; that women are the ones who solicit men, and the more they have, she is taken as the most honored, as it will seem according to what I say:

That in the city of Chuquisaca, riding by mule along a street, two women were laughing to themselves in a house, and among the words I heard, one said to the other:

You are a sow if you do not have more than two who love you.

And I said to the one who came with me: If that is the case, it would be better for her to have four.

And the one to whom I said this responded:

So it is, father, that the woman who does not have four or five is taken for a sow and of low esteem.

And the married men of this land are so good that all this goes on without any more pain than a headache, in that they need do nothing more than have masses said so that they [their wives] return home, as the Indian men do.

And so this is the business of this land. The outfit is that which I have said of the Indian women who live in the highlands. The outfit of those of the plains is different, because they do not put on anything more than a closed garment like a hooded cape [capuz], with

some tails dragging, like the ones they have in Castile; naked, without any other clothing, tossing aside that black covering; and the hair black, loose spread out over the shoulders and breasts, and those black and toasted by the sun. And when they go walking the dust goes out through the opening of the cape, which they have at the breasts to put their head through such that when one sees them they seem, in their great filthiness and so on, like nothing other than witches, or something from hell, because they do not seem like creatures of the earth. And that land is so hot, and that sand, that the bodies of those who die, even 300 years afterward, remain whole, since it never rains in those dunes nor does anyone remember it ever raining in their lifetime; and as a result, since there is no humidity, the corpses do not putrefy. And all the plains are full of those bodies of mummy flesh, given how they are buried and everything is sand, within four to six months the air finds them, because the sand passes from one part to another, such that where one goes to bed with a plain, one awakes in the morning next to a great big hill of sand. And I experienced this from Paita to Olmos: so that three leagues before arriving at the city of Piura we walked at sunset toward a great hill of sand, like a small mountain, which with no more than two throws of a two-ounce stone I could have arrived at the top; it dawning the next morning, all was flat as if there had never been anything there. And I asking the Indians what had become of that mountain of sand, they showed how it had moved about a half-quarter of a league, where the wind had passed that night; And thus it was true that which they showed me, and I did not see it there in the morning but later, where I discerned it with the greatest care looking at the countryside and the disposition of the land.

This sand is very fine, ground like the sand of a sandglass and very subtle; and for this reason the air lifts it with such ease, and the largest grains remain amid the lifted. And thus the pack trains walk with great effort, usually placing their feet in the same footsteps. And upon this sand there sleep the Indians of the plains, without removing their capes from their bodies their whole lives; and in these also they are buried, not having any other shroud. And this is their dress.

The dress of the Indians of Quito and the New Kingdom of Granada and Santa Fe is quite different, the Indian women very white and very beautiful, more so than the Spanish women. And as it is so hot as Quito is under the equinoctial line, at zero degrees, they only wear some very light cotton mantles such that they reveal flesh almost transparently and if there is a light breeze it catches and lifts the cotton mantle from one side to the other, and all the features of the parts of the body so clearly revealed that one can see the one who has good and shapely legs.

All these things I took note of to write about them, although it may seem to come from excessive curiosity; but I place it alongside the rest, this not being a bad thing as long as the soul is not dirtied with sin. And so I felt this dress was more lascivious than that of the Moriscas of Granada, who paint themselves up to mid-leg; but on the whole they are covered with clothes and these others go naked with their flesh like an alabaster; and when they go walking, it is with such a short little gait that they seem to be dancing the saraband. Such that the priest desperately needs the spirit of God to find the power to recover his senses and think of other good things, so as not to divert himself in so much

lasciviousness, so as not to offend the majesty of God with one's thoughts, so as to not desire that which the eyes see in those Indian women, as mortified as they carry one away. This is with regard to the dress of the women of the highlands, whom as I said before are registered in Potosí among parishes and counting only Indian men and women they number 200,000 souls, not counting the Spanish; as there are fourteen parishes of Indians. And asking carefully of the parish priests how many Indians each has in his census, I came to find these: the parish of St. Martin, 700; that of St. Francis, 900; that of St. Peter, 1,200. To go through all of them would be a tedious thing; but for curiosity's sake there are many more than I have said, because I am only counting the married men, minus their children which are many and quite numerous, which if I could verify with some certainty I would put it down here.

In the middle of the Indian parishes is the town of Spaniards, where the main church is on the square. And all around it, two blocks apart, are the monasteries of St. Dominic and St. Francis, and of [Our Lady of] Mercy and St. Augustine, and the fathers of the Company of Jesus. The number of Spanish people in Potosí is many, almost as many as the Indians; and many soldiers who wander around without a trade of any kind. And these sustain themselves on gambling and by living in concubinage with rich black women and with rich Indian women, who supply them with food and clothing; and these [soldiers] have nothing more to do than to wander around all day on the cobbled part of the square, where none but the most valiant tread, and they are so numerous their quarrels that hardly a day goes by in which there are not two or three deaths of men stabbed right through. And this is so extreme that in the fourteen months I was in Potosí not a week passed without some five or six deaths of men, and most of them without confession; and days of three deaths that left me marveling at the quarrels. The folk are many and all soldiers without trades; they no nothing more than to strut, and with the least provocation to put their hands to their swords, and usually it is over gambling or women; and the most common is for calling in men for debts on their estates, in charging one with what he has borrowed, if they cannot come up with all that he wants, he later challenges the other so that they go together to charge his estate [?]. And thus there rise up some with their estates against others and they deny them and do not fear justice nor anyone. And it is a very free land because each one lives as he wants, with no one holding him to account for anything. And they do many harmful things to the Indians. And thus, the estates of this land are never enjoyed, because although one may have 100,000 pesos, in dying no part of them appears and no one knows what became of all that estate except that the Devil took it, as it was ill-gotten.

Everything they purchase in Potosí is in silver pesos: a pound of grapes, when they are first ripe, is worth four pesos, and after that they go down to one peso; and four figs, a real; a fish they call dorado, which would be twice the size of a sea-bream, an artisan comes along and gives thirty pesos for it, such that they do not recover the lost silver; a partridge, one peso; a hen, 2 pesos; a kid goat, two or three pesos; a pair of shoes, three pesos; some lace boots or buskins, eight pesos; and a dozen apples, twelve reals if there are many, and if not they are worth much more. And in this way all the other things are valued: meat is not too costly, as a sheep costs two pesos, and a quarter of a beef another

two; bread sells at a real for two pounds. And this is the smallest coin there is, although for giving alms on Holy Week they do so at Lent with some half reals.

There are along the banks of Potosi's main creek and in Tarapaya 97 mills that crush the ores. They call it a bank not because it has trees, of which there are none for twelve leagues around Potosi, but rather because it forms a ravine through which water flows to drive these mills, such that in each mill they take each day two 'pinecones' of silver, and thus in each day in Potosi they extract 194 pinecones of silver, of that milled in the mills; and this is the harvest of this land. And the silver is so much that in the book of fifths pertaining to the king, our lord, I found that from the first of January until the end of April, which is four months, they had poured 4,300 bars of silver of more than 800 pesos each. And from this one could more or less how many bars they take out each year, which would be more than 14,000. This is the greatest wonder the world has, and I know of none greater.

Each of these mills has a great wheel moved by the water; and this, with its movement, which has a great axle that runs through the middle of it like in the wheel of a gristmill, lifts eight stamp-heads that crush the ore. And with each four wheels there are so many Indians who go feeding [ore into] them, some by day and others by night, such that at no time do they stop. And another four Indians sift the ores, and another dozen take them to the basins [cajones] to refine them and add mercury to them. And each night they light a fire beneath those basins until it appears to them that the mercury has recovered all the silver. In this refining they also add salt and later take out what remains, as it emerges in the same way as clay, from which they make tiles or bricks in Spain; and they put this in some barrels like round washbasins, where another wheel some things like paddles which go along washing, and the water carries off the earth that remains and what is left at the bottom, at the base of the washbasin, is the mercury with the silver, and it is left in the form of a ball, and later with the fire of charcoal the mercury is driven below and what remains is the pinecone of silver, clean as a little sugarloaf.

There are also mills powered by horses for when there is not enough water in the creek, which does not last all year as it is not from a spring but rather that collected from the rain that falls in winter. And the horses turn the wheel in the same way one would turn the wheel of a gristmill; and in that way the wheel lifts the stamps, just as if by the movement of water. And this is very costly, because to sustain a horse for a day costs a peso, which is eight reals; and this is not to fill [its belly] but only to keep it from dying of hunger; and this I spent on a mule I had, eight reals a day for just one mule. The water that runs the mills comes from some large reservoirs located above the town, about a half a league from it; the water therein being collected from the snow of the sierra thereabouts; and should these reservoirs break open, they would carry away the whole town. And for this reason they pay a salary to a master who goes about continuously repairing and also managing some floodgates, taking care to release the water necessary to turn the mill wheels, but not too much, so that the water lasts longer; and this one takes cares to release it after feast days and to let some out every Saturday at midnight. The reservoirs are six, three in one valley and three in another, and they go connecting up each with the next, such that the water of one feeds into the other.

There are in Potosí very rich Indians, in particular one they call Mondragón. One day I went to the house of this Indian, who holds the office of inspector of weights and measures [fiel ejecutor] in perpetuity, just to see him and his house; and from Spain one may come to see this one's house. And I found him eating on the floor, on a low table, as the Indians typically eat on the floor without a table at all, nor do they use even a chair, but rather always sit squatting like broody hens. And this one, being hispanized in dress, had a table, but very low like a small stool. And he has all of his capital in his house at all times, before his eyes. He has a room filled with silver, in one part the bars, in another the pinecones, and in another, in some jugs, the coins [reals]. I was quite stunned to see so much silver in one place and I asked him how much was there, that I was seeing, and he replied to me:

-There are 300,000 pesos of assayed silver.

This one loans to the king every year 100,000 or 200,000 pesos for the fleet to take; and later they go discounting from the fifths that he has to give the king from the bars he makes, because the business he has is to buy pinecones and make bars and hammer them into coins [via the royal mint]. And in each one of these things he earns in all at such and such a percent, and little by little it gets to be more as he does not engage in other exchanges where he might risk his estate, but only this which he has constantly going on in his house. He is a man who must make many secret pious donations, but public ones, no, and the general opinion is that he makes none. There is another called Hernán Carrillo, a mestizo, son of an Indian woman and a Spaniard, who is a man of much machinery in mill complexes; but this one I do not take for so rich, because if he mills many ores, he has enormous cost. And so as to write this I went to his house one Sunday after eating, to see him pay the Indians; and he paid them that afternoon, the wages he owed for only that week, 6,000 and some pesos of corriente silver; such that every week he spent and paid out this quantity of silver, only for the Indians he had excavating in the mountain and working in the mills, not counting the salaries of the Spanish majordomos he has in these complexes.

There are also very rich Indian women and mestizas [pallas], with whom the soldiers live in concubinage so as to sustain them. And of these the fathers of the Company [of Jesus] have a confraternity dedicated to the Baby Jesus, so rich that in the world there is nothing similar. And on the morning of Easter Resurrection they make around the square a procession worthy to be seen and committed to memory, that which they carry in it; the same which I will describe here according to how I remember it:

In front there was a bordered standard, so rich it cost 12,000 pesos; the Indian who bore it went very well dressed, with a shirt of 'three-heights' brocade and a hatband made of gold and emeralds that cost him 300 pesos. He carried on with a large group of people and wore a mantle of crimson velvet with wide braid gold trim; and of all the other adornments they use, very rich. Later there passed another standard, also very costly; later a cross with a cloth sleeve at its base, the best in all of Potosí; later a pendant all bordered with pearls and gold, which I would not even know how to price, except to say

that all was silver, gold, and pearls. There went along the sides in two files many Indian women, all in procession, without a single male going in between, dressed in very fine silks and worked velvets, and beneath the azú [wraparound skirt] a petticoat finer than those of the Spanish women. The llíquidas, which are what they put over their shoulders like a shawl, were of velvets and damasks; and the ñañaca, which is the cloth they put on their heads, the same; the chumbes, with which they bind around their bodies, were of wools of many colors, as they themselves use them, all of them most curious. All of them carried candles and fat tapers lit up, and as it was before dawn, at the break of day, there appeared so many lights in the square that it was as clearly lit as if the sun were out. And I put myself in a spot where I could count the fat tapers of five pounds each passing by and I counted on only one side almost 300, such that in that procession there must have gone by more than 500 five-pound tapers, not counting the Indian women carrying candles, of which there were many. And at this time, as I have repeated various times, a hundredweight of wax cost 300 pesos of plata corriente. At the very rear there went some litters or biers of silver, all marvelously worked and inside the baby Jesus dressed in an Indian costume with a yacolla, which is a shirt without sleeves, and a squared mantle over his shoulders, so rich with pearls and emerald stones and so well made that it was worth a great sum of money. And in sum the Indians of this religious confraternity have, they being the richest of Potosí, the best of the entire town.

Of the many things there are in Potosí

The square of Potosí is most abundant in all things, the best plaza in all of Peru in provisions. In the six months of the year [sic] there is never a shortage of grapes. There are many apples that they bring from Cusco, 160 leagues away; a dozen apples costs one peso of plata corriente. Of green figs, four for a real; dried figs and raisins, all year; lemons and oranges, all year; pears they bring from Chuquisaca; fruits native to the land, many of them all year; garden vegetables and greens in abundance, brought from twenty leagues away; in particular the lettuces are very pretty and very white, and the leaves quite compact, like cabbages; radishes and thistles and kales and many other herbs of the land, that they eat in their pots and stews. There are many jugs of milk, and in the streets they sell curds and creams; there is much salted fish and fresh fish from the Pilcomayo river; every Friday many shad. The salt fish from the sea are all delightful. There is always much game in the form of partridges, which are as big as hens; and vizcachas, which are like hares in Castile. At any time, hens in the square, at two pesos each; and when you want to eat them, that is when they must be slaughtered, and if you slaughter them as night is coming on, because instead of becoming more tender they become rock hard with the cold; and thus having finished plucking them and placing them in the roaster, it is all one piece; and in this manner one may eat. The square is always well stocked with bacon from the town of Tarija, which is the best cured meat in all of Peru; and this is cheaper than in all the other towns, as a slab of bacon costs no more than five pesos; and a ham that weighs 16 pounds is worth 12 reals and sometimes less, such that with a peso one may buy one. For the better part of the year meat is very abundant, because an arroba of beef is three reals and a sheep, two pesos; and because it is always cool, it never spoils, and a quarter of beef lasts fifteen days in the larder, and the meat is so mellow and tender that it is the most delightful in all of Peru. The stews, so as to eat

them at midday, are put on to cook the night before, such that, the night coming on, they light the charcoal and put the pot on and when they go to bed it has already been skimmed and the vegetables added; and they leave the charcoal lit and little by little it cooks. And this is due to the climate of the land; and if it is not done thus one cannot eat the stew the next day.

An arroba of charcoal is worth four reals, which they consider cheap due to the great consumption of it, because around Potosí, in those high places where there is ordinarily much wind, there is a great number of guairas, which are a type of tallish little ovens like the cork of a beehive, where the Indian women with charcoal 'guairan' the rich ores and take out the smelted silver, and they toss in there the ore stones and in between them the charcoal, and it has many little windows where the wind enters and ignites the charcoal and the silver goes out molten and running below. These ores that these Indian women smelt are rocks very rich in silver; such that the Indian man who is picking away in the mine, when he finds a rich stone containing much silver, he hides it, and when he goes out of the mine entrance to receive the food brought by his wife on Wednesday, he takes out the stones he has hidden and gives them to the woman; and although the mine administrators look them over carefully, with all that they still steal what they can. And later, as they eat there by the mouth of the mine on Wednesday, and seated there for a moment with the wife, later they go back inside the mine and not until Saturday do they come back out. And they carry a little sack of toasted maize and a bit of chili or peppers; and there they sleep and take care of their bodily needs; and as a result, in the mountain there inside, in many parts there is a foul odor.

And the mine owners make the Indians work too much, and they do not let them sleep at night for the number of hours they have ordered; and as the miserable ones are continuously there inside picking, they know neither when it is dawn or dusk. And thus these folk are given a great amount of work, and many Indians die of illness, others from falls, others drowned, and others knocked out by falling stones; and others remain there inside buried, such that hardly a day passes without one of these things happening. And as they are so many, being more than 12,000 as I said those who are enclosed in the bowels of that mountain, between those who pick and those who carry the ores out, in one part or another there is some disgrace. It broke my heart to see when the Indian men came out on Wednesdays to eat at the mouths of the mines, to receive the food brought to them by their wives, with their wails and tears upon seeing their men come out covered in dust, skinny and yellow, sick and tired; and beyond this whipped by the mine owners and cudgeled for not reaching their daily quota with their mounds of ore; and there is no consideration that the vein is hard, and usually it is worst for the poor Indian who finds hard rock, as he spends half a day beating himself to pieces but cannot break it, whereas if the rock is soft they make him take out five small mounds of ore a day, which would be eight or ten arrobas, the five mounds.

And in the end, of those rich stones that have more silver that they keep hidden, they give to the women, and it is with these that the Indian women 'guairan', along with many others for which they barter in the square; and that barter is permitted in Potosí because of the excessive labor that the Indian men have. And in the end there is no pound of silver

that does not cost another and more in blood and sweat for these most miserable of the Indians; such that at the cost of their blood they take out that which they refine. And although it is known that those ores they barter with are stolen, it is permitted after all for the reason I mentioned. About this there have been many opinions among theologians, whether it can be done or no; and in the end the mine owners go to great lengths, searching the clothing of the Indians when they exit; and in the end they know they are carrying what they will anyway, and they pass along and conceal it, and so they say it is not invito domino [the lord having worked against his will].

And the Indian women also look through the stones that are discarded at the mouths of the mines, which they call pallar, and they break them and choose the good and break off that which is not so good. And this with the other is sold in Potosí every day at noon. And before this hour not a single Spaniard may buy anything from the Indians; and this is done so that the Indians have a chance to buy these ores, as there are many Indians who buy them for their guairas. And for this reason firewood is expensive. That consumed by the ovens is brought by the llamas and each llama load is worth four reals, which one could hold in a fist, or at least with one hand, a whole llama load. The very same manure of the llamas is worth silver in Potosí, and there are Indian women who wander about the countryside collecting the droppings of livestock and for each small sack of them the mill owners give them a peso. And so as to show how extreme all this is, I say that the same excrement of humans is worth silver, and they sell it, and they have built for this purpose in Potosí certain large corrals where the Indians who walk the streets come to make use of them; and that excrement they mix together and dry in the sun and later they gather it and pile it up and per sack of that they are given eight reals, as it is used to fire the negrillo ores, so that it may be refined and mixed with the paco ore. Although now a creole man from Mexico has discovered a means of refining this ore by adding lead to the mercury, and with salt, and they take out a great amount of silver, such that they write to His Majesty as a thing most certain that in the coming year they will yield two million pesos in royal fifths alone, because this ore is the richest one may imagine. And with this will be resuscitated not only these kingdoms of Peru but the whole world, because there is much of this ore all around.

The usual beverage of all the Indians, used by those of Potosí as well as all of Peru, is called chicha, which is made with maize flour; they put it in water and boil it; and five days later they drink it. It is so strong that it dizzies one and really makes one drunk, and from Saturday night until midday Monday they do not stop drinking. The Indians spend in the following manner: they buy numerous jugs of chicha, each jug of which costs them a peso; and an entire ayllu, which is to say a whole group of kin, gets together in a corral; and with a drum in the middle of everyone, they all circled around, each taking the other's hand, the Indian men and women go dancing heavily all night, not stopping, nor does the dance end, until all the chicha is gone, along with all the money they have. And at any hour of night one hears the drums of the Indian townships; and as they go whirling about dancing, all go drinking, both men and women, until the jugs of chicha run out; and both the men and women are left so drunk that they fall on the ground like pigs. And on Sunday very early in the morning they go to [the church of] St. Francis to hear mass, and later they return to their dance, such that they go so far as to consume everything they

have earned that week in drink. And in eating they spend very little because they eat no more than that toasted or cooked maize; and with a bushel, which costs them five or six pesos, they have enough for many days. On clothing they likewise spend little, and the same with footwear, as they go about [all but] naked and shoeless. Thus drinking is everything; and if one says to them 'why do you not save money for your children?' they say they do not have an account for that, as their children work just as they do; such that those who want to eat and drink must earn it. And thus when they go back to the mountain the next week, they do not have even a real, nor anything with which to make a will should they die.

These Indians walk alongside the llamas, which are brought up with their same phlegm; and they have so much that if one of those llamas sits down while loaded, and does not wish to get up, even if the Indian gives it a thousand blows or all but kills it; and as much as they might twist its tail or squeeze its testicles, it will not get up. And the Indian sits in the road alongside the llama, and there he stares at it for two or three hours until the llama gets up on its own. And the rest of the Indians go walking ahead with the rest; and for this reason the Spaniards do not drive them, but only Indians, as it has come to pass that some Spaniards accompanying these llamas, stopping to lie down on the road tired, which is very common, the Spaniard wanting them to rise kills them with blows and leaves them dead along those paths; and for this reason no one accompanies them except Indians, as they are phlegmatic.

This is [not] a type of livestock for heavy labor, and it does not eat at night, and it dies very easily because it is very delicate, particularly in hot country, and the heat does them great harm, and it later gives them much mange [carache], the same which is treated with lard and ground sulfur. And on these llamas they bring to Potosi all the supplies and all the flour, both of wheat as well as maize, and the wine and fruits, and all the rest, such that all year they do nothing but enter loaded with maize flour, which is all consumed in chicha, because they do not eat it. And all the maize they harvest in the valley of Cochabamba and that of Pitantora and on the frontiers of Tomina, which is a great quantity, and in all the other valleys, all this flour the Indians of Potosí consume in drink. Of the frontiers of Tomina I may write based on the time I was there, I found out that from that which had been tithed, that they had harvested 600,000 loads of maize; and all of it was taken off to Potosí, and they pay for it one year in advance. According to this one may figure out, more or less, how much Potosí consumes; and from each load of maize they make 16 jugs of chicha.

Potosí enjoys a wind they call Tomahavi, and they call it that because it comes from the direction of a town that has this name. It blows especially in June, July, and August; it is a great wind and it raises much dust from the dirt there is around the ore-crushing mills. This dries everything out, and the brains and head feel this very much as long as it lasts. There are ordinarily many quarrels and deaths. And everyone's clothing gets very dirty, and for this reason the men do not wear black but rather brown broadcloth. In these three months it tends to snow a lot. And all year, whether there is snow or not, Potosí is greatly blessed in its water, which is always so fresh and so cold, that a man cannot fill himself with water, nor satisfy himself quickly, since his sinuses will ache from the great

coldness; and thus it is necessary to rest, because it feels as though one's teeth will fall out; and this is all year, and in any weather. At night the moon is very pretty, and very clear. There is a very faint breeze that goes right through to the bones; and thus one is always in need of clothing, a bed, and food. And the men live quite healthy because they have good supplies of bread and wine and meats; and all that is good they go looking for it in Potosí.

The people are of good understanding; and of 500 men who enter to hear mass, with their brown capes and full of ore dust, the one who knows least knows grammar. And thus, with those brown capes they argue when things are over, because one has a licenciate from Salamanca, another a bachelor's, one an artist and the other a theologian, one a civil lawyer, another of canon law, and physicians. And all together, all are devils in matters of trade, evil in rising up with their holdings these against the others. This is what there is in Potosí, and so on.

Feasts of Potosí, in the feast of Our Lady of Guadalupe

The next year, which was [1]601, there arrived the feast of Our Lady, which was on the eighth of September; and the first thing done was to put the image in [the church of] St. Francis, with the solemnity we mentioned before. The town began to come together to celebrate it according to their devotion and done first in the Mercedarian monastery, which celebrates the eighth day of September, the following Sunday which is the infraoctavo of the Nativity, it was celebrated in the monastery of St. Francis in this way:

They said the solemn vespers which filled the choir with all the religious and singers of the main church and fifers, and to the church [came] the corregidor don Pedro de Córdoba Mesía, knight of the habit of Santiago, with all the town council and the whole town. And the vespers being over, a most solemn salve was said with the supplicatory procession that remained in place behind, the image being on a bier in the main chapel, with much majesty with great tapers and candles in the lamps there. And from the church the corregidor went on horseback with the whole town council and all the rest of the people of the town to the house of chaplain Alonso de Villalobos, who was the master of the ring [tournament], and they went out accompanying him with trumpets and bagpipes and they paraded it through the streets of the villa; and ahead of the master, who went between the corregidor and the town magistrates, there went a young man of good body on a horse, well adorned about the bridle, the same [young man] outfitted with cuirass and back plate and helmet with visor, and in his right hand an unsheathed sword, and the left arm covered by a shield upon which were placed the challenge tercets that follow. And in this order they arrived at the square after having paraded through the streets; and they attached the placard to a canopy that was hung outside the town council building; and later the horsemen had their contest and the master returned to his home; and they lit lanterns and tolled the bells of [the church of] St. Francis and shot off many sky-rockets; and then the whole town went on reciting, until midnight, the verses of the placard:

Challenge placard of in the Feast of Our Lady of Guadalupe

Between hard-packed snow and white rime ice, In the coldest and most frozen season, Which the sun sees, for all the zones it passes,

His brazen force and proud brio The strong Celinardo wishes to show In public and honorable challenge.

Not excluding with the brave spirit, So many who enjoy from the north our pole, Summer gay and winter brown.

All that sustains, that which merits only To serve the sublime and excellent lady Whose light obscures the bright Apollo.

To which the printed word solicits and calls Those who in the Antarctic regions Want to win for themselves glorious fame.

To the City of Cusco:

And to those who among the fierce big-eared ones And the respected Inca, their monarch, They planted the Hispanic banners.

To the City of Chuquiabo (La Paz):

And to those with the benign mark of peace The rich Peru whose eternal glory Did not negate the inexorable fate.

To Chuquisaca and Potosí:

And to those who live where the memory Of the fertile metal that this mountain engenders Give name to the city and likewise victory.

To all in the square is the challenge, To three lances, French or Spanish In honor of the angelic Mary.

Do not fear the sea for her gathered waves, Since in order to conquer the honorable prize It is sufficient, with such favor, your strength alone. Do not aspire in the dangerous moment To defend of this excellent Virgin That which, clearly, is not difficult.

And if the Omnipotent Father should crown With twelve stars her imperial head, What glory could useless people give her?

It is greater than the sun her celestial beauty, More than the white moon her loveliness, And more than the sun and moon her purity.

If she is the line between which God and the baby [Jesus] Has its holy seat, it is no use For him who would try to defend her holiness.

He is not rational the man who does not understand That being mother of her eternal son He chose her and he himself defends her.

And thus from happiness and mirth, To visit us, this beautiful virgin, The Imperial Villa as selected field.

Here could the one who is her devotee To celebrate her holy birth Come guided by such a bright star.

And if in rich La Plata was your intent To demonstrate gallantry, where they find, Apollo and Mars, their divine seat.

Who for such feasts is prepared, Comes to the villa alone in all the world, That Apollo and Mars should be there, she shall come.

That I defend alone, and without second, That I deserve to serve her, and that it is owed This, only to my furious arm.

Here may come he who dares To put a price on ladies, that his skill Is who makes him lose it, or who carries it off.

And he who knew to make curious display Of his valor, and galas in La Plata Well he missed the occasion, and may come to ours.

That this ring shall only wait
Till the day that Francisco, humble and holy,
Is given the seat that shall destroy Lucifer [que a Luzbel maltrata].

What ladies does it have, who deserve so much, Potosí that in its garden [prado] they are flowers As so many covered by the clear silken veil To whom to give jewels and ask favors.

Prizes of the Ring

To the one of greatest invention, with the greatest subtlety and propriety takes it, he will be given as prize a rich silver fountain.

To the most gallant in body and livery, he will be given as prize a richly gilt silver flask.

To the one who brings the best lyric, according to the invention, most subtle and witty, he will be given as prize a very rich gilt cup.

To the one who best handles the lance, French or Castilian, with all its requirements, he will be given as prize a cut of rich fabric.

Rules of the Ring

The adventurer who does not sign shall not have a set time, and shall look for the unoccupied [moment] that fortune gives him.

No adventurer shall enter without a mask, much less with privilege [fuero] of man of arms.

The adventurers shall not pass through the cloth except at gallop.

To him who drops his piece or loses his stirrup, loses the prize.

The lances perforated and set in holsters [caladas y engargantado] also lose the prize.

No adventurer shall enter the square, with or without invention, without asking license of the judges.

He who wraps a lance with a [promissory] cord, may not go back to the tournament unless the judges give him license so that he may request a lady.

The exempted colors are black and white.

The judges of this ring tournament were don Pedro de Córdoba Mesía, knight of the habit of Santiago, corregidor of Potosí, plus the lieutenant and the two town magistrates.

The next day in the morning they commenced early to say mass, and there were so many people, Indians and Spaniards, that the church of St. Francis seemed like our own in festival season, and the image was in the middle of the chapel within a six-sided tabernacle, the same which covered half a cupola that sat upon six columns, all so adorned and with so much wax that it was set with greater authority than the one in our house [in Guadalupe, Spain] in terms of the wax, because there the image is within a grating upon a small altar and without wax, and in Potosí the whole eight-days' festival [octavario] had twelve huge church candles with twelve large tapers and many ordinary candles, and these burned brightly from the morning until 10 at night, such that only by force could we get the people to leave the church. The hour of high mass arrived, which was celebrated, as he was there in Potosí at this time, the most illustrious lord, the maestro don Alonso Ramírez de Vergara, Bishop of Charcas, the same who celebrated it as pontificate with the authority and majesty that one may appreciate because he was from Estremadura and most devoted to Our Lady of Guadalupe, and thus he asked me to make another image for his city of Chuquisaca for whom the lord bishop made a chapel that cost him more than 30,000 pesos, and there is no better thing in these kingdoms, as so many who come here can affirm.

On this day when there was a mass said by the pontificate there was no sermon, but there was one later, the next day, that I preached, and in it I thanked the townspeople for the great devotion they had for Our Lady, and for how well they served her, and of the hopes they might have for her favor, and I have come to this point as I have put down other notable things, as another one of them, and the most [significant] considering the circumstances of my few studies I put also here the sermon for the glory of Our Lady, and to console those who knew me in Spain, without the depth of knowledge [caudal] for such high ministry, I do not put it here as something of my own but rather as something received by the grace of the most holy Virgin in whose service I was occupied.

The pontifical mass being finished, there entered into the church more than sixty men from Estremadura in a disguise that greatly entertained the townspeople, all of them dressed as Jews with red soldier's breeches, and they brought a Jewish fiancée and for this they sought out the tallest youth they could find in Potosí, and upon his high-heeled shoes one could see the fiancée from two blocks away. There came four musicians with their guitars ahead of the fiancée, and they sang a couple of tunes with much grace, and next the Jews danced, such that when they were finished, the townsfolk were doubled over with laughter. And later they went to the churchyard and rustled up a little cow and went out through those streets, wandering and gathering many people behind, in particular the Indians who had never seen that disguise.

With this the townspeople went to eat and in the afternoon, at two, things began to pick up again, and all the confraternities came with their crosses and long tapers, and the saints on biers, both the Indians and Spaniards, who are numerous, such that a procession went out as solemn as on the day of Corpus Christi. The streets were strung [with

garlands] and there were very rich altars. The image [of Guadalupe] was taken to the square where there was a theatre and there they put on a play of the history of Our Lady herself and her miracles; the same which were represented by some street actors, but very well performed, such that the townsfolk were left with greater devotion; this play was also my own work, and was performed at the start of the festivities celebrated later in Chuquisaca because they also chose to perform there again just as they had in Potosí, [and] anyone who may have a taste for verse may read it.

The play finished, the procession went on, and we returned with the image to [the church of] St. Francis. The sun already being down a salve was said with the proper solemnity as always, the same which was said on all of the eight days, the whole town attending with much devotion, asking that many masses be said, and thus the whole time I was in Potosi I never lacked alms for masses with which I sustained myself, because the alms for each mass is two pesos of cash silver [plata corriente], which is 16 reals; and then on the next day there began the eight-days' festival [octavario], [and] the entire town attended the high mass, the lord bishop and the two town councils, secular and ecclesiastic, and the sermon I preached them on that day is that which follows, leaving aside others that I preached later.

In this order the eight-day's festival [octavario] went on being said, with the greatest solemnity, there being a sermon every day, these being allotted among the best preachers of the orders available, and afterwards each of whom I thanked individually for having occupied themselves in the service of Our Lady, and each one rose to the challenge such that all the sermons were extremely good, because all entailed very learned suppositions, and I, as a disciple of all of them, learned from them so as to preach on the last day of the octavario, such that I was the starter and the finisher. To Her the thanks for all, since with an abundance of grace she worked on the hearts for devotion to her image.

On all eight of these days there were festivities in the square in the afternoon, all very good, with bulls and the game of canes [an equestrian challenge] and a don peroleño [a spinning mannequin struck by riders] with which the costumed folks on horseback entertained themselves. There were good rounds with lances and poniards, and rounds with the people on foot because for each one there was a prize for him who did it best, all of which were distributed after the running of the bulls. There was also a literary joust in which the Most Holy Virgin of Guadalupe they celebrated with many and very curious verses, and to the two best poets they gave the prizes, such that if I were to put down all the verses, both in Latin and Castilian that there were, a new book would be needed.

In this way they went on celebrating this octavario with much devotion from the townsfolk. And the platforms of the square were left in place, and they went on making many more and new ones and on one side of the square attached to the shades and windows of the town council building a screen was made, with a counter-screen, for the game of the ring. And in the middle of the square they set up a tent of crimson damask where the master of ceremonies remained while the adventurers entered into the square, and the festivities of the ring commenced on the assigned day, which was that of our father St. Jerome. That day they sent me to preach as if for a feast for our Glorious Father

himself, and thus I agreed and preached the evangel *vos estis sal terrae*, and that which I lacked in grace was substituted by the devotion and pleasure with which they listened to me in Potosí; as on the day I preached the church was quite respectable with all the noble people of the imperial villa, of which there are many, and of very good understanding; and thus with their communication I went little by little polishing mine. The festivities lasted until the day of the seraphic father St. Francis, patriarch of the poor. The order in which the festivities took place was the following, and I will put down all of them because, most certainly, there were on those days things worthy of putting to memory and that in any part of Spain would have seemed well.

Later, at about two in the afternoon that same day of our Most Holy Father, there climbed onto the stage the judges of the [contest of the] ring, who were don Pedro de Córdoba Mesía, knight of the habit of Santiago, corregidor of Potosí; the general don Juan de Mendoza, the lieutenant and two town magistrates, among whom I [also] had a seat that day, so as to be close to the image and the display cabinet that was there, set up to place together all the curious works of silver and gold there were in Potosí, and which had been taken out of the merchants' stores, all the silks, fine fabrics, and rich cuts there were. They placed there corsets with ambergris, many bars of silver, and [silver] 'pinecones,' such that what was in the cabinet that day was appraised at 200,000 ducats, because this villa is the wonder of the world. Later the lord bishop was seated on a balcony where they had placed his chair, and with him were all the prelates of the orders and the clerics and friars seated in good order along some stands in the square. And the judges' platform was connected to another large one, upon which were all the ladies and ranking women of Potosí.

And later, once the townsfolk quieted down, a clarinet was played at the opening of one street, and the master of ceremonies entered the square with his godfather, and in front of them there entered two horses covered with drapes of damask, white and blue, which was the color the master of ceremonies took off behind these two horses that carried them so skillfully, and there entered 12 lackeys with the same outfit of white and blue damask and later the master of ceremonies with his godfather on white horses which for the occasion they searched out so that painters could apply blue patches so that they would match the outfits; and the master of ceremonies took up a long cape of blue velvet with slits of white, and on the blue fields of the silver harnesses was the name of Mary in white letters, and on the white fields, in blue letters. In the middle of the breast as a badge was a painted image of Our Lady of Guadalupe, the hat blue, with its medal a Mary, with letters topped by a crown, and the horses' plumes and the feathers of the hats white and blue, and afterwards 24 pages with the same outfits of white and blue damask such that it delighted the whole square and they circled all the way around it without doffing the hat to anyone until they reached the place where the image was and a curtain was dropped and the bagpipes played and [the master] doffed his hat before his lady and went on to his tent where he dismounted to await the adventurers who were to enter; the placard he carried said:

In my lady, although brown, So much beauty she encompasses,

That she holds up both heaven and earth

These verses were done this way because that which the master of ceremonies was defending was that the Most Holy Virgin was the most beautiful, most lovely, and prettiest lady, and the most perfect creature outside her son, and the one who garnered the most interest of all the many there might be in heaven and on earth; and against this there were most gallant thoughts as will be seen in the discussion of the festivities that I am putting down here in the order in which they took place.

Later, as the master of ceremonies had dismounted in his tent and set up the shield on one side of it (on which was painted the image of Guadalupe on a blue background in the form of the heavens for half, and the other half like the sea, and on the half that looked like heaven there was a star and in writing below, in the sea, stela maris, and all around the shield as trimming was lettering that said Regina omnius culmina coelli benet; then they began to play the clarinets and make the call to battle; and afterwards there responded from the mouth of a street a couplet of bagpipes that came on a triumphal cart pulled by four horses, which came whipped by a savage; the car was all green and woodsy with many arches of ivy, and it is worth noting that within twelve leagues of Potosí there is not a single green branch. Between the arches there were twelve men and boys dressed as women and as savages, with all the best ornaments they could find, all with instruments in hand: violas, guitars, zithers, harps, and rebecs [rabel, pastoral instrument], and other instruments, all of them sang from the four corners of the square as they went, making rounds, four admirable tunes, with great dexterity and gracefulness of voices which they had, and good ones. What they sang were lyrics of love for the divine, since the adventurer who was entering was called the Cavalier of Divine Love. There entered later, behind the musical cart, four ladies on four tame horses fully caparisoned with velvet and with silver saddles, and seated, dressed in different colors according to what each one signified, with full flowing tunics [sayas] so rich, with so many jewels of gold and stones, and so many trappings of extraordinary ornaments that the story would never end if I were to specify in particular that which each one of these ladies carried. They carried from the reins to the tame horses some satirical half-bodied horses and jutting out were the heads and breast, and what these four women represented was mercy, justice, peace, and truth, each one holding in hand the insignia of the one she represented and by lettering that covered their arms in some white ribbons tied to the arms and on these was written that verse of the psalm misericordia et veritas ovia verunt sibi justitia et pax osculatae sunt. Later there entered the Cavalier of Divine Love with his second, the same who wore as his cuirass, painted on the breast, a pelican spreading its wings and sustaining its little ones with its very own blood, which is a symbol of love, and the lettering said:

First the divine love Who in God himself is sheltered Was cause for our life

This lettering was in this fashion against that of the master of ceremonies who defended [the position] that the Virgin had caused greater effects in God than any other thing, and

the Cavalier of Divine Love said that divine attribute was what moved God toward the redemption of the human lineage, and that it was the primary cause, and the Virgin secondary, and that thus the glory of redemption should rather go first to Divine Love than to the Virgin, which was a very gallant way of thinking. The outfit with which he entered the square was most admirably good because he came in dressed in the Roman fashion, the arms and legs naked, and on the feet some sandals with very rich pearls, the cuirasses and all those hanging flaps were of a silver cloth finely interwoven with purple silk, and on his breeches were the little slits and out of them fell gold leaf, such that when this cavalier ran, the little slits in his trousers were squeezed, and all along the raceway the townsfolk remained collecting the bits of gold leaf, and this was done to enhance the wonder. He went out crowned in laurel, and with a staff in hand, and the godfather took out a vaguero of blue velvet with braided hem of gold and silver, which shone brightly. There entered the lackeys and pages of the Cavalier of Divine Love in outfits of purple so as to match with the thoughts of love. This shone so, and the musical car so animated the square, that they said that the entry of this cavalier alone sufficed for the festivities of that day had there not been so many others. Then the master of ceremonies went out from his tent and mounted his horse and the godfather took up the lance and came to the site of the screen, and likewise the Cavalier of Divine Love, after the judges gave him license to run the race, and this with so much music of bagpipes and clarinets that came in with the cavaliers, that the whole plaza was gladdened with so much rejoicing that it seemed that Our Lady was moving it all, and in particular that she made the day, and the afternoon, gray, and without sun, such that it seemed that we had an awning placed over us, and it is certain that Our Lady placed it across the sky. Because ordinarily, in that season, there is most awful weather. In the end they ran their three lances, each one, and well did the master of ceremonies fill his prize, which was a rich cut [of cloth] that cost 70 pesos, plus two cushions of blue velvet worth 100 pesos, such that the Cavalier of Divine Love lost in those three runs of the lance 170 pesos, for which he paid later with a pledge of gold, left with the judges by this Cavalier of the Divine Love. They gave him the prize of gallantry, which was a very rich gilt silver decanter, because his Roman outfit shone so, and the display so extremely good because he wore the cuirass of silver cloth and the breeches of gold leaf in which he expended two pounds of gold dust that he bought to make the little slits, costing him 400 pesos. This was the alderman Juan Díaz de Talavera, and Captain Merlo his godfather, men with estates worth more than 100,000 ducats.

Later, this Cavalier of Divine Love having finished his run, a great music was heard at the door of the main church and there entered by way of the churchyard a great mass of people all dressed in the habits of priests, and there came down into the plaza from the churchyard some seventy mules, all caparisoned, and those mounted upon them all covered with surplices, such that there remained no cleric's outfit nor mule that was not brought out, and the more there were, the more they kept coming, all of whom accompanied a cavalier who was entitled Cavalier of the Church, and that one carried the prize of the lyric, which was a very rich gilt silver cup that cost 25 pesos per mark [1/2 lb.] to work, because the thought was very subtle and in which he reared his horse much. He carried as emblem the Church, which was a painted body: the legs made up of virgins and confessors, the trunk of martyrs, the shoulders the apostles, prophets, and patriarchs; the neck the Virgin, and the head, Christ; and the lettering said:

It is my Lady in the head, Much more beautiful and lovely, Than that which is mother and damsel.

The thought of this lyric was most elevated, and thus it was given the prize later, because the preference Christ gives to his mother is well known; and as the head of the Church is Christ there was no doubt about giving it the prize, and thus it was judged to be his lady in that body part of greater perfection than the Most Holy Virgin. Behind all who entered on caparisoned mules, there entered four evangelists on four horses and they in apostolic garb with diadems on their heads and in the middle of the four evangelists a very pretty boy dresses as a woman with his hair down, atop a tame horse with caparison of crimson velvet and a silver side-saddle. The finery, the jewels, the pearls, the precious stones, dress, and adornment the boy who represented the Church carried was such a sum that there is no way to estimate that which he had on for this occasion because they searched out all the significant things they could find among all the ladies of Potosi, [and] from the four arms of the side-saddle upon which the boy rode there came out four large silk ribbons which were held in the hands of the four evangelists who carried the Church in the middle, and behind the four evangelists there entered the four doctors of the Church, each one dressed according to the dignity he had, the bishops with miters and the popes with tiaras, and he who represented our father St. Jerome with a cardinal's hat, and the caparison of the mule of cochineal, the same which the lackeys carried on their shoulders, with so many lackeys and pages as they could muster in Rome, behind the four doctors there entered the Cavalier of the Church with his second dressed in red, with his ponytail covered in brocade and crimson velvet, so brilliant with so many pages and lackeys that this Cavalier of the Church alone brought 200 people on foot and on horseback, with such great order and coordination, that many men who had found themselves in many parts of the world and among great festivities, affirmed that they had never seen anything like it. At the moment when they were set to run the lances there entered by another street on the plaza a demon on horseback, so dexterous that they appeared of one body, with a letter in hand and blowing a cornet like a mailman. The lord bishop ordered the Cavalier of the Church to suspend the running of the lances until he could find out what news that demon brought, and what the letter contained, the same arriving near the judges and he gave it to him and awaited a reply, and the tenor of the letter was as follows, the same which was read in a loud voice so that the bishop and the rest of the prelates and theologians would hear it, in order to respond to it.

Letter brought by the demon:

From the dark dungeon of these infernal caverns (where I have my royal throne of torment, with the nobility of the angelic nature that descended with me, in the middle of the Stygian lake, burning with live flames of sulfur, incited by the great fire of envy), there has now arrived news of such novelty that I am obliged to leave that fiery cavern: and it is that a cavalier who bears the title of the Church is there in that square to run at lances in the competition with Mary. And since the Church is running against the jewel and most principal member of her body, thus could a prince like myself defend on this

occasion Proserpina [taken by Pluto], since to her alone must the vassalage of beauty and loveliness be given. By force of arms may this be made manifest to the world, giving me license as judges, that I may appear in this square with my people. -- dated in this instant [deck?] of the boat of Charon, last of September, day of the bearded Jerome, year 1601. -- The Prince of Tartary [Hell].

After reading it, the judges formed an opinion with the bishop and the theologians present about how they had to respond; and with the joint opinion of all, the judges took ink and paper and responded with the following arguments:

-- Your letter we receive, Prince of Darkness, in which we have seen demonstrated your ancient arrogance and how you and those of your kingdom are authors of falsehood. You lie in the report of the Cavalier of the Church, because although it is true that he is in the square to run at lances, the intention and resolution he brings, according to his device, is not in competition with Mary, nor against her, but rather for her honor and glory, and so as to make her festivities more merry, which is all that act is. This would be still greater should your haughty pride be crushed, with humility for our Great Queen, with whose favor we do not fear your arrogance. And thus we give you license so that you may enter into the square at five in the afternoon, with the requirement that we make of you, in the name of Jesus Christ and of his Mother, that you shall not do damage in the square; and in a way that all may recognize you, and that you not return transformed into an angel of light. - dated in Potosí, on the 30th of September of the year 1601. -- The Judges.

This reply the demon took and off he went with the same nimbleness with which he entered; and as he was exiting the square he went tossing many broadsides to the people with this lyric on them:

The Prince of Tartary, who of sulfur Sustains himself in the dark cavern, Will present himself at half past five And he thanks those that up to there shall suffer.

After the demon left the square and took the reply, it became unclear if the Cavalier of the Church would be able to run, contemplating the words of the letter from the Prince of Tartary that said:

Against the jewel and most principal member of its body.

The lord bishop said that if the master of ceremonies would defend that the image of Guadalupe was the most perfect image of all, that he could indeed run, because the image of the Church was the most perfect, and that it served Christ with the greatest number of merits and not the Virgin, leaving aside the prerogatives of the Virgin as a singular person. I responded that the master of ceremonies defended nothing less than the Queen of the Angels, represented in the image of Guadalupe, she was the creature of greatest perfection ever; and with regard to creatures, Christ was always the exception, and thus this was not treating of the head of the Church, but rather making up the entire body, but

leaving aside the principal part which was the head; but with such there could be no competition, and for the rest it was not just that they go against the main member of all its body which is the neck, whose place the Virgin held. The judges remitted this business until the lord bishop and the rest of the theologians spoke. And thus it was determined that they would offer a prize to whomever could run the best of three lances, dropping all competition and leaving aside the ideas brought forth; as they had already won the prize for the lyric which was a meditation of the highest order. And thus they ran for some cuts of very fine cloth, plus an amber corset. The master of ceremonies won at lances and gave the prizes to the ladies. As the Cavalier of the Church had finished running, he left, and the master of ceremonies retired to his tent to take lunch. And since the people of the square and up in the windows began to do the same, there began to go out from the master of ceremonies' tent the bagpipers piping and behind them the second, on foot, which was Capt. Martín de Gárnica; and behind him were eighteen pages, all in costume, with eighteen large silver platters, full of food, and behind them another 36 platters, which were carried by pages and lackeys, all in costume, piled with very good food, confections, slivered almonds, marzipan, and sugar-crusted pumpkin and citron. Of the sixteen platters that went in front they gave six to the judges, who were alone on one stage, and the other twelve they lifted up to the bishop's window, where he was with his prelates of the religious orders; and he took his food and sent the rest to his clerics, who were below. The 36 platters they gave to the ladies, who were all on one platform that took up a whole bolt of linen's worth of the square, where there were assembled all ladies and principal people of Potosí; and for each two ladies they gave a platter, such that the guardsmen were their guardsmen, and they took home prizes and food and they said that they ought to have those festivities every day. And thus the townsfolk demonstrated great merriment and contentment. And just as the lunch was finished, at the mouth of one of the streets they fired two pieces of artillery and many sulfurous sky rockets, such that it seemed like nothing less than the earth trembled. And then there entered into the square many demons on very swift horses, all with black clothes and flames of fire, the same which came accompanied by a cavalier in between them dressed in a Turkish outfit, with Moorish cape and turban who was said to be Mohammed, brought by the Prince of Tartary as his second, because the hood of Guadalupe, as the demons called it, took out the captives from his lands, and for this reason he was brought as second. There then came out from amid that artillery smoke a triumphal car, which was pulled by four dragons, which were being whipped by a demon, and above the seat where this demon whipping the dragons rode, there came a mouth of hell, out of which there spewed from time to time a huge flame. On top of the car, at the four corners, there came four statues of four famous heretics who wrote against the virginity of Our Lady, Justino [Giovano di Roma], Sabelius [Elvidio di Milano], and the rest. In the center of the car, a drapery of mourning; and, set alongside, two chairs; on the one on the right hand side there came seated Proserpina, her face and hands very white and beautiful, her hair black, and the veil on her head black striped with gold and from mid-body downward as a serpent with its tail wrapping around the car and holding in its grip the statues of the heretics. On the chair to the left side there came seated the Tartary prince, dressed like a tortoise; with wings and tail, winding around in his black locks some serpents; his beard long and black, and in his right hand a mace with so many flying fireworks that the whole time he went around the square he was emitting rockets that went into the sky. And thus as they

reached the image a curtain came up and covered it, and he passed by without paying homage to her, and he went on ahead until he passed the counter-screen. He carried as device, on his shield, a painted image of Our Lady of Guadalupe, and below, at her feet, there was painted a serpent that represented Proserpina; and in the middle there ran a label that said *inimicitias ponam inter te et mulierem* [I shall create enmity between thee and the woman] and as orla of the shield, a verse on a black background, with large black letters, that went around the entire shield, saying:

The 'a-b-c' is reversed; As the 'M' is before And the 'L' comes after.

This verse was meant to show that the celebration of the name of Mary came against the opinion of Lucifer, whom that feast contradicted, and that he had only come out of his infernal caverns to revive the ancient hatreds that had existed between serpent and woman, and thus he placed the Latin verse mentioned before at the feet of the image of Guadalupe. This shield was placed in the tent of the master of ceremonies; and later a clarinet was played in the same tent, and the bagpipes responded, and out came the master of ceremonies, and he pulled the veil off the image. And then there came the Prince of Tartary's second, with all those demons, and they came shouting this verse:

That which Mary in heaven Raises up, upholds, and elevates, Does not reach my Proserpina Covered in black veil.

And Mohammad, the second, placing himself before the judges, requested the field, and in response it was conceded to him, and that he should signal for what price the Prince of Tartary wished to run. He responded, 'The whole world.' The judges replied that the whole world was not his, and that since he was not the lord of it he could not set that price; and that he should set another. The prince responded from his car that since the master of ceremonies was defending that Maria was the most lovely lady, the most beautiful, most comely, discreet and perfect among all creatures, then he would defend the opposite, that all that which heaven had could not reach the beauty of his Proserpina, and that the price, with interest, would be that he who was defeated would remain prisoner of the lady of his opponent. The master of ceremonies' second responded that the contest would be allowed. And then the demons went and lowered the Prince of Tartary from his car and mounted him on a horse. And then the bagpipes sounded and the master of ceremonies ran and he took the ring, something not done throughout the whole afternoon; and there occurred something that seemed to all miraculous: he did the same the second and third tries, such that all three times he took the ring with his lance; and thus the lord bishop ordered it put down by scribe's decree in the form of an oath certifying the sentence pronounced by the judges. And thus by force of arms and by law, the most Holy Virgin remained victorious, as it seemed that she permitted even in those silly games, that the master of ceremonies would take the ring three times in a row, when no one had been able to do it all afternoon.

The lances run by the Prince of Tartary were all three of fireworks, such that the lance was hollow and filled with powder and rockets; and the fire so measured that when it began to split it began to split fire, and when it arrived at the ring it shot out three or four thundering rockets and turned entirely into fire. Later there arrived both seconds to await the judgment, and as the master of ceremonies had taken the ring three times, and the lances of the Prince of Tartary had been lost, the Prince of Tartary was sentenced to remain prisoner of the Virgin; and the sentence proclaimed was the following:

'In the Imperial Villa of Potosí, of the Kingdoms of Peru, on the 30th day of the month of September of the year 1601, we find that according to the rules of the ring, we must declare and do declare the Prince of Tartary as prisoner of the most serene queen of the angels, the Virgin Mary, Our Lady, who is represented in the image of Guadalupe; for not having run, the Prince of Tartary, with all the legal requirements of a man at arms; and the lances, both French and Castilian, with which he ran, have been perforated, without having kept the order and sequence of the lances from taking them out of their holders and having lost them, for not remaining with a lance in hand in order to return it to its holder, as all of them turned to fire. And also for the master of ceremonies having taken the ring with such grace, we must condemn the said Tartar Prince to be removed from his horse and a chain attached to his neck, and his feat bound to the image of Guadalupe; the same which shall be done without disappearing from the square, in the name of Jesus Christ, under penalty of his disgrace and besides the intense fire of hell.' And the judges signed their names.

Then as the Tartary Prince heard the name of Jesus Christ pronounced he fell from his horse, and Mohammad and all the remaining demons departed on their horses with amazing agility; and the triumphal car began to shoot off so many rockets and spew so much smoke that the serpents coming out of the statues of the heretics and from that of Proserpina all turned into fire, and in such a way that in a quarter of an hour there was not a moment when the rockets ceased going off, and we could not see each other amid the smoke, nor could we hear each other, as the noise was so great that it seemed like nothing less than all hell in the square, as they certified [later] that two hundredweight of powder in fireworks had been brought in; and flying out it seemed like a thing from hell itself. The fire over, all that machinery of the car was left destroyed and turned into ash, as if nothing at all had entered the square. The master of ceremonies' second, once the fire and smoke had ceased, and the clarinets and bagpipes sounding, took off his spurs and took a chain from the jail and placed it around the neck of the Prince of Tartary, and made him climb up onto the stage where the image of the Our Lady was and tied it to his feet. And then they brought the shield of the Tartary Prince that was fixed to the tent of the master of ceremonies and seeing that its lettering said *inimicitias ponam inter te et mulierem*, we took off that insignia and broke it to pieces, and put up another that said ipsa conteret caput tuum [She herself will crush your head]. To this Prince of Tartary was given a large and very rich silver platter, weighing 25 marks of well wrought silver, as prize for his invention, which was admirably good and very costly, and all so timely as to cause great pleasure. He remained tied by his feet to the image until the night we carried her in procession to [the church of] St. Francis, and he went in front, with his chain around his

neck; and there at the door of the church, he mounted a horse and left with the remaining demons who were waiting for him at the entrance to a street. This was so enjoyable that I have not been able to recount it as well as it appeared.

Later, from another street, there entered a cavalier bearing the title 'Savage of Tarapaya,' all dressed in moss from trees, the same which had been brought to Potosí from sixteen leagues away. There entered with him more than two dozen savages, all of whom came with maces in their hands and dressed in that moss, which was something to see, as they really seemed like wild men. In the middle they came with a huge rock outcropping, and inside it a horse and cavalier who represented the Inca, monarch and king of those Indians. The rock came constructed in such a way of hoops and mesh that not a thing could be seen of horse or rider. It came along in between the savages, and as the horse went walking along it carried the great rock, going along with an armature, and draped with painted cloths and papièr-maché, with some folds resembling a rock outcrop, along with some grass placed in certain parts such that it really looked like an outcrop; and all the savages surrounding it as it made its way around the square tossing proclamations. And the lettering said:

There comes within this rock, In the middle of its hardness, Our ignorance and coarseness.

This they said because there came there inside their king, as he and they both had lived like savages, in ignorance of the true law, the serpent having deceived them. And likewise the Incas have in their old coats of arms a snake.

Behind the savages there went following after the rock a very large dragon with wings that was so well constructed that the legs of those who went along inside carrying it truly seemed to be the legs of the dragon. It carried along the inside part, by the flanks, some great beef tripes, like intestines full of blood; and they went along announcing that that rock was enchanted and that from it there had to emerge a cavalier who in honor of the Virgin had to run at lances, and that this could not come about were it not for a lady so wise as to break that spell and free that cavalier who came inside. And having gone about the square they all stopped with that rock outcropping in the middle of the whole square, where everyone could see and enjoy it; and the savages placed the heads of their maces on the ground and waited for a short space of time, and then there entered the square by another street a multitude of Indians of all the costumes and lineages [ayllus] and provinces found in Potosí. They carried in front of them a standard they use, which is a long staff with some feathers all the way down in the manner of fletching on an arrow and on top the image of the sun who is the god they adored. These Indians came dressed in their native costumes and with so many feathers that it was a marvelous thing to see. They came playing the instruments that each nation used to play. Behind them came a lady in Spanish dress on a groom's horse with a caparison of cumbe in a thousand colors of the finest wool and a great silver saddle. And all the savages upon reaching the rock outcrop they raised their maces on high and the Indians came calling it to release their king from that enchantment, and begging for it in their language with great anguish. She

responded that she could not do that unless they tore down that standard of the sun and set in its place that cross; the same which the Indians then did and the lady arrived at the rock and with the same cross gave it three strikes in the name of the most Holy Trinity. And at that moment it ignited with much fire and with so many skyrockets that it seemed twice as large, and little less than that of the Prince of Tartary's hell; and the whole rock went up in flames and there remained in the middle the horse, and on top of him the Inca, with the very same outfit he had worn, which was something to see. The lady took the image of the sun and threw it in the fire, and as the Inca saw the lady, he dismounted from his horse in order to kneel down before the feet of the Faith and adore her, and at the moment that he was going to put his feet on the ground there arrived the dragon who had been behind, and opened its mouth and swallowed him up, and then the Indians raised a great ruckus and voices, as if it burdened them greatly that their king had been freed from that enchantment and of that spell and danger in which he had been, and now another worse one had happened, which was to remain trapped in the bowels of that dragon and demon, who had impeded him from converting to the faith that he had begun to believe. And they went a second time circling around the square with the dragon, pleading that if there were but one cavalier who would dare to fight with that dragon and free their king. The lady counseled them that if they did not entirely give up their adoration for Apollo, and adore instead that star who was in her place in the square, who was the Most Holy Virgin, that there would be no means by which their king would be freed; and that they should plead with her, that she send people to fight with the dragon.

And later there arrived the savages and Indians and they went down on their knees in front of the image of Our Lady of Guadalupe; and they being thus, there sounded from the mouth of a street some trumpets, as if from people on horseback in full march, and there entered into the square a dozen men at arms, all with breastplates, back-plates, and morion helmets, with such elegant plumes that it caused great contentment to see them; the same which came accompanying a cavalier who bore lance and shield, the latter representing the preaching [of the gospel]; and he carried a lance to wound with the divine word, which cuts more than any knife, with its two edges, as per the Apocalypsis, and the shield to parry the arguments of the heretics and of barbarous nations. The men at arms that accompanied him represented the power of Spain. Then the Indians and savages made a wheel and in the middle they had the dragon, and the men at arms formed a small squadron on one side of the square and the cavalier went after the dragon, and the dragon turned about with such agility, and the horse was so well trained, that he fought with it for a quarter of an hour, with such gallantry that the people were held in total suspense; and those who were inside the dragon swung its tail about with such swiftness that it struck the horse with great blows. And the cavalier so agile that upon one foot or one hoof he turned the horse about three or four times, and gave a leap from one place to another withe such lightness and dexterity that although fighting until now he did not tire. And from each blow and thrust of the lance that was given to the serpent along those flanks, there flowed out so much blood from the tripes that were covered there that the whole ground was painted with it, and at times it yielded great spurts of blood, that a real dragon it seemed to be, up until finally tired it collapsed on its side on the ground, and the cavalier dismounted, and with a blade he pulled from his waistband he opened its breast. And he pulled out the Inca who seemed to emerge from the very entrails, his face so

dumbstruck that it caused admiration; and he embraced the 'preaching' that had liberated him and he took him for his second in those festivals, and they put him back on a horse and accompanying him were the savages and Indians. They went circling around the square with the Inca, who carried many things to contemplate, both for his dress and for his arms and insignias of all the Incas that he bore on his shield. They went tossing many broadsides and the lettering on them said:

For this clear star Which we have seen in our pole, I cease to adore Apollo.

This lettering was of this variety since the devotion that the Indians reserved for Our Lady of Guadalupe was so great that they called her the Great Chapetona, which was to say, the New Lady in the Land. And seeing that the Spaniards celebrated her with so many festivities, they said that that lady was the most beautiful of all; and they entrusted themselves to her and brought her their sick, and placed them before her, and they received from Our Lady great favors. And so all those Indians and savages went on to reach the screen with the Inca, their king, whom they titled the Savage of Tarapaya. And they gave him a lance, and that cavalier who had freed him from the dragon he made second; and they ran very well, such that it was necessary after having run three lances each, they were ordered to run two more since they were nearly equal in the previous ones, so much so that the master of ceremonies could not distinguish them. And in the two final ones, the Inca won, and thus he was given the prize, which was fourteen yards of spade velvet and some ambergris gloves. And the Indians remained quite contented to see that their king took the prize, and they celebrated much.

The cavalier was a good horseman, and thus did this all very well, and the invention he brought was quite ingenious and gave great pleasure for the great variety of things it had, such as the enchanted rock and the dragon swallowing the Inca, and the outcropping going up in flames and leaving the man on horseback in the middle, as if he had emerged from the entrails of the stone; and later the fighting with the dragon, which was done with such grace, spewing so much blood from the wounds that that whole area of the square was left looking like a bull had been killed and disemboweled. And afterwards they went with a cable dragging the serpent, and they removed it from the square; all with such cleverness that the dragon seemed to be of nothing if not flesh and bone, as it was so well painted and composed. And thus was ended this invention.

These four contrivances were the best of the lot, and for this reason I have put them down here, recounting in particular that which was most curious about each, and although there were many other challengers, some did not bring contrivances, and others were not as built-up as those I have mentioned. And thus I leave them so as not to tire too much, and because from that which I have said up to now one may take a fair impression of the whole fiesta together; and there were, for certain, so many things that in any part of the world would have seemed well. All of which I worked up and put in order, speaking up and urging on these and others so that they might serve Our Lady of Guadalupe; and all to establish her cult, and so that after I left they would carry on with it every year, in their

way, this same procession. And the alms to be requested, and each day they are more and thus they shall be, because I left there named with the title of majordomos three councilmen [regidores], who call for alms every Saturday, and they are: Diego de Alviz, owner of mines and mills, a very rich man; and of the twenty-fours [town council members] Juan Díaz de Talavera and Martin Perez de Gallate, very rich and honorable men; and there is not a single Saturday when I was there that their call for alms did not yield less than twenty pesos of current silver. And thus, with these images I left in Potosí and in all the remaining villages of the Indies as a perpetual rent for the house of Guadalupe, since all the alms they collect are for Spain, in accordance with the documents I left regarding this matter.

5. 'Of the Rich and famous Mountain of Potosí and of its grandezas' and 'Of the Imperial Villa of Santiago de Potosí.' Selections from Martín de Murúa's *Historia General del Perú*, 1616 (Getty Manuscript), ff.379r-383v.

Martin de Murúa, a Mercedarian friar, ends his massive unpublished history of the Incas with two chapters on Potosí, one treating the mountain and the other the city. It is clear that he saved Potosí for last, as it comes after descriptions of almost every other major town or city in Peru, including the 'ill-fated' Arequipa of recent disaster. All that comes after is Murúa's table of contents. An earlier version of this manuscript dated 1590 but actually compiled in 1596 includes a briefer overall description of Potosí but does include a full explanation of the iconic image of the Cerro Rico flanked by the Pillars of Hercules and overseen by an Inca (see frontispiece).

Chapter 30: 'Of the Rich and famous Mountain of Potosí and of its grandezas'

Without surpassing or exceeding the limits of truth I can affirm that this Imperial Villa of Potosí, of whom [sic] this chapter shall treat, is the richest, most opulent, and most renowned of any known on the entire planet [orbe], and the one to yield the most rents to its king, and more silver has gone out from it alone than from all the others in the world put together, and one could even say that it enriches all of Europe, Asia, and Africa, because whatever is superfluous in Spain is distributed to all the remaining provinces, y a espana bien se sabe que la hinche el cerro de Potosi de barras que del salen cada ano.

Some refer to the year of 1540, more or less, or of [15]43 according to others, [as when] this famous deposit [mineral] was discovered in the following way: Hernando Pizarro, brother of the Marquis don Francisco Pizarro, who lived for so many years imprisoned in the tower [en la mota] of Medina del Campo, was at the site of Porco, seven leagues from Potosí, with many Spaniards, working those very rich mines (which had they not struck water would be the most prosperous in the kingdom). And from there, having need of food, he sent one of his yanaconas to buy maize in Chuquisaca, and this Indian along with another yanacona belonging to one Diego Mateos, whom they called The Rich, with a few llamas [carneros] they set out, and spending one night next to this mountain of Potosí, they slept alongside in what is today the parish of San Benito, because all that is inhabited now was then marsh [senegal], and some of the llamas brought by one of them having gotten loose he went climbing up the mountain. It was full of groves of quinua,

little Peruvian trees found in the puna, and one of these Indians went to catch the llamas so as to load them, and as he found some missing, one went off to search for them among the quinua groves until he arrived at the vein and mine they call 'Of Tin,' where he found his llama, and taking notice of the signs, he being an Indian who had worked with ores, he took a little and carried it to his companion and showed it to him, and once back in Porco and having milled a bit of the ore they had carried, they smelted it with a wind furnace [lo guairaron] and extracted much silver from it, and the Spaniards having news of it, they went to reconnoiter the mountain and to sink test diggings in order to assay its ores, and upon reaching the measure of their desire [y acudiendo a la medida de su deseo], they began to populate a site, and later in a different spot, the Villa, which is where there had been the marsh [cenegal], and it went on growing such that there are in it today as many Spaniards as in the greatest city of the kingdom, and more than in [the city of] Los Reyes.

The mountain stands alone, without having any other around it that is attached to it. It is rounded and in the shape of a sugarloaf, with one part of it facing east and the other toward the north. On this part they found the first veins and the most principal ones, and they were five: that of Tin, the Veta Rica, la de Muiza [sic, Muniza], that of Mendieta, and that of Sozo. From these veins there go out huge branches that have crossed the entire mountain, and run from north to south, and such is its grandeza that all the earth and rocks, loose and fixed, that are found on it, above and below and in the Villa itself, wherever they may be, have contain some silver. And one may gain from the principal veins. As I have said there come out infinite caminos y veredas de plata with different names corresponding to their discoverers and even today they discover more, some of the names of which may be put down, although not all of them, because they are innumerable and one may count in one vein thirty-five adits and diverse names. From the Veta Rica there go out those of Centeno, the King's Adit [Socabon del Rey], Chinchilla, Antona, that of Berrio, Our Lady of Grace, St. Barbara the Upper, Holy Spirit, and many others that they work from the King's Adit and from that of Centeno and the rest. From the Muniza vein: the adit of Juan Ortiz Lobato Polo (?), St. Peter, St. Paul, St. Christopher, Our Lady of the Remedies, Pancorbo, and many others. From that of Mendieta and Sozo there go out those of the Flemings, Patero Sozo, the Blind Men - Lower and Upper, Cibincos, The Clean, All Souls, St. Anthony, St. Francis, Purgatory, and many others toward midday [directional]. From the Tin Vein there go out St. John, La Pedrera, the Mondragon adit, St. John of the Tin, St. Barbara, the Millstones [las amoladeras], and many others. Toward the western part there is attached to this great mountain another, about a quarter of its size, which comes out of it like a woman's teat, coming right out of it without division, which the Indians call Huaina Potosí, which means Potosí, Jr. It is toward the north and has many veins of silver, and if you are not looking from the town you would not see it, as there is, as I have said, no division.

The color of the mountain is dark leonine, and from foot to summit it is a long league of climbing, and at the base it is three long leagues around.

The veins are at 200 statures' [depth], some more or less, according to their type. They went along following the richness and those that are two-thirds of the way down give

over to 'little black' ores [metales negrillos], and also those that fall from the west and from the south and many that are toward the east, and none have hit water up until today, which has been the origin and cause by which they have been followed and sustained, and if fortune had been ordained que se atinara in the refining of the negrillo ores, and from them could be taken the greatest richness of silver that they have hidden [que tienen abscondida]. It is beyond doubt that just by taking them out of Potosi the rents will exceed those of all Europe, but God's Majesty has not wanted it to be discovered in order to reprimand the soberbia of the Spanish and to place a limit on the insatiable thirst for money they have, and which has grown with the rise of silver. The nearest mountains to this one are those of Cari-Cari, about a league away, on the other side of the lakes [i.e., reservoirs], toward the east, with silver veins that some work. The mountain of Guari-Guari is five leagues away, with silver and copper veins that are worked. Andacahua is at three leagues, another mountain with many negrillo ores. That of Hachachiri, at two leagues, with the same ores, and that of Tullosi, likewise abundant in negrillos. And that of Masnisa, at nine leagues. That of Box, and many others full of rich deposits, should they be refined.

The name of this mountain, the most illustrious of any in the world, in past times was Potoche, and today the old Indians keep it, the Spaniards corrupting the pronunciation by calling it Potossi. They have to pass through the adits that are now there, more than 2,000 [workers], and entering into them a man must go with a candela in hand along the ladders made of cowhide through such different parts and places so dark and tenebrosos that even the most experienced [cursados] lose their bearings [el tino] and get lost, and there are some narrows such that a man on his belly can barely squeeze through. In sum, in the mine what goes on is a portrait of hell in darkness and confusion, and so it appears to all those who go about in it. Roses and flowers to barter to for silver [unclear what the author means here, unless it is to contrast the lives of mine overseers with native mineworkers], the mineros who go about in the working of these adits, they being the criados of the mine owners. They would be above 700, all of them gaining tremendous salaries. There ordinarily work in the mines above 12,000 Indians, 8,000 of them barreteros and the rest called apires, which are those who carry the ores. They expend each day in the mountain more than 1,500 pesos' worth of tallow candles [candelas], not counting those used up in the town and mills.

The mountain has a chapel dedicated to the seraphic father St. Francis, with the richest ornaments and aderesos of silver, in the same which every Thursday mass is said, and in order to hear it there gather the mineros and infinite Indians, because on Sundays and Saturdays in the afternoon they go down from the mountain into the Villa, and it is by that road that cannot hold all the people that they take up to the mountain all the gifts that could be eaten in the most abundant cities of Europe, the old and young Indian women, and they do not want money for them but rather ores to barter so as to exchange them below, and thus they are there provided with what is necessary all week. Llamas go up and down, loaded with ore for the mills, such that they are not lacking at any hour of the day.

Your Majesty has on this mountain an alcalde mayor de minas and three veedores who look after reviewing the adits and to resolve the differences that result from the workings between mineros when they occur. In order to look after and care for and favor the Indians there is a protector general and a defender and contador de granos. Now we have said something touching upon the mountain, so it would be well to go down to the villa to treat of its grandesas.

chapter 31: of the Imperial Villa of Santiago de Potossi

This famous and most rich villa is painted with an imperial eagle with a crown on its head, and as I understand it these arms were given by the most invincible emperor don Charles V, plus his two columns. The construction of it [i.e., the city] is commonly neither polished nor worked with expense, because those who live in it only keep their eyes on taking out silver and more silver and going to spend it in other places in this kingdom with better climate and to their liking, and thus they take little care to edify [curan poco de edificar], and only the churches are of expensive fabrication. The climate of this villa is aspero y desabrido, especially in the months when there come some extremely powerful winds [corren ayres arebatisimos] that they call tomahavis that carry away houses. This villa does not produce any local product other than silver, but even so it does not lack a single thing necessary to human life. Because at seven, ten, twelve, and twenty leagues [distance] it has extremely fertile valleys that provide it with flour, maize, barley, and all manner of local and Spanish fruits that one may desire, and it has them all year sinque se sienta falta, and the ravines and stands [of trees] sustain it with charcoal. There are salt springs at nine leagues [distance] that provide [la hinchen] with salt.

It has seven lakes made by hand and with artifice of the Spaniards that power the mills, because the rains in Potosi last only three or four months. There are nearby, at a little more than two leagues [distance] stone for milling, most necessary in order to break up the iron and make it into flour, with which they refine the ores.

The main church is of medium size, although it ought to be larger given the people who surround the villa, but it is most rich in costly ornaments. The lamp that burns before the most holy sacrament contains 420 marks of silver, and two others, one of Our Lady of the Conception and the other of the sacrament contain 100 marks, and the chapel of St. Ann they adorn with three lamps of 80 marks a piece, and that of All Souls and St. Crispin at another 80 [marks a piece]. And this church is continually served by more than thirty priests [sacerdotes], not counting the priests [curas] and sextons, and its vicario who enjoy ovenciones y provechos muy ricos. There is also good music with instruments, and everything required for the divine cult. It is abundant what they have in order to 'illustrate' more than five convents of religious: Dominicans, Franciscans, Augustinians, and of Our Lady of Mercies, where there is an image muy devota that performs countless miracles, plus the Company of Jesus, all with lovely ornaments. And everything that one might wish to request in order to be well served, and in them [there are] famous preachers and most observant religious who sustain the villa and who are walls against the power of Satan who there seeks to extend more each day.

The villa is named for St. James, and its patrons and principal advocates are the Immaculate Conception of the Virgin, Our Lady, and the great doctor of the church, St. Augustine, and St. Barbara. The hospital may well be the richest in the entire world as its rents surpass 40,000 pesos, all which are spent in it each year, not counting alms, and thus it is very well served by all the ministers there are in it. And the head physician is always of the most experienced in the kingdom, and the sick are there cured with much love and regalo, and no one who may be poor would leave there naked, as the alms that come in from charitable persons are so great that they could be dressed in silver and gold.

There are fourteen Indian parishes surrounding the villa which are: Our Lady of Las Carangas, St. Bernard, St. Martin, Our Lady of Copacabana, St. Peter, St. Paul, St. John, St. Sebastian, The Conception, St. Francis, St. Christopher, St. James, St. Barbara, San Benito, and another church of St. Lazarus. These parish churches are very well adorned with rich ornaments and silver lamps, [with] many religious brotherhoods very well served, and the priests have a salary of 800 assayed pesos paid by the royal treasury not counting their 'pie de altar' which in some reaches three or four thousand pesos, and thus these benefices are highly esteemed and sought after.

There resides in this villa a corregidor with a salary of 4,000 assayed pesos, and he always tends to be a knight of some habit, of great valor and brio, which is good to have for the people who are in it, because it must be the climate that flows in over that villa and its district such that when a poor and luckless man of a cowardly nature enters into it, on the instant he sets foot there his thoughts are raised such that he does not value silver, nor does he make savings with it, and it seems to him useful only for fighting with a battalion of armed men. It has its alcaldes ordinarios and regidores and a fiel executor whose office was sold for 60,000 assayed pesos, plus the alferazgo of the villa in another 60,000, and the staff of head bailiff who oversees sixteen others below, in 125,000 Castilian ducats.

The royal treasury building [casas reales] is the main one in the Villa, where there live His Majesty's factor, treasurer, and accountant, who have salaries of 3,000 assayed pesos each. This building has inside it the storehouse for mercury where they collect the 6,000 hundredweight that they expend each year. There is also the smeltery and assayer's office. It is public knowledge that they smelt in it each year above 20,000 bars that come out at 80 marks each, from which is paid to His Majesty the fifth, and it is understood that the sales taxes [alcabalas], mercury [sales], and royal duties add up each year to three million [pesos], which is a rent that many kings of Christendom do not have for their entire kingdoms, whereas the Catholic king of Spain gets this from only one villa.

There is a mint building that is the only one now in Peru, where on the part of the king and private persons they make each year more than a million and a half [pesos] in reales. It has a treasurer whose office was sold for 60,000 assayed pesos, and it yields in provechos each year from six to eight thousand pesos. There is a scribe for entries, a guarda mayor y menor, four capataces, one assayer, four trujuleros, and twenty blacks belonging to the king, minus other persons who serve there, and all with very elevated

salaries, and through its door one sees nothing else but entering pinecones [silver ingots] and taking out the most beautiful bars.

There is in the Villa of Potosí Tarapaya, which is two leagues from it with a river and lake alongside it, and in Tabaconuño 158 'mill heads' [cabezas de ingenio] using the water they bring from the lakes I have mentioned, plus eighteen horse-powered mills. Each water-powered 'head' mills in a year more than 30,000 hundredweight of ore. And in each mill there go along occupied with the milling, cernir, repasar, and quemar lamas fifty Indians by day, and thirty by night in each mill. For its operation [abio] there is a carpenter, a refiner [beneficiador], an assistant, and a head majordomo. Each 'head' has eight posts [mazos] with eight stamps [almadanetas] that weigh five arrobas, not counting infinite pertrechos que seria nuna acabar el referillos.

The Indians distributed by decrees of His Majesty are 14,800, which cannot ever be short [of this number], and in order to supply these there have to attend to the labor 44,400 over the course of a year. And these go from all the provinces from 150 leagues around to the labor according to what befalls them, and so many Indians are needed because they work day and night, [and] in the adits it is always night. That which they pay to the redistributed Indians who work in the mountain is four reals, and to those who are rented out according to their own will, who are infinite, and called mincas [sic], if they are apires they give them a peso, and if barreteros a peso and a half, which is twelve reals a day, and if one obligated Indian hires another for a week he gives him nine pesos, and last the day wage that a Spaniard must pay, likewise in the mills, by order of His Majesty. is three-and-a-half reals per Indian, and for those who rent themselves out, six reals, and for those who toss ore into the morteros at a peso. And there are a thousand more differences in pay. If by chance an Indian should die due to the carelessness of a Spaniard who has charge of him, he pays a circulating bar of 250 pesos and now they also add a half-year of exile. There have to be in Potosi ordinarily residents and inhabitants who work by decree or who rent themselves out who enter and leave with food, firewood, charcoal, straw, and other things. More than 80,000 Indian men and more than 250,000 [probably means 25,000] women, plus more than 50,000 children. There must be up to 8,000 Spanish and mestizo men and more than 3,000 Spanish women. [There are] more than 4,000 black men and women, [plus] many stores of Spanish clothing and many more of local [colonial] cloth, shopkeepers and hawkers [regatones]. There are fifty tradesmen of all trades: shoemakers, tailors, blacksmiths, carpenters, locksmiths, silversmiths, and bakers, all uncountable, and all gain and all get rich and it is certain that if they kept what they earned they could - all those to whom I have referred - found within a very few years the greatest entails. But as I have said, here silver enters the house and leaves with the same ease, [and] there grow there the notions of devaluing the silver, spending it and wasting it without order, so much so that some wager and spend in an afternoon everything they have earned in a year, and they leave contented and without any sign of feeling it.

They slaughter in Potosí each week 250 cows, and more than 500 llamas, not counting Castilian sheep, which are infinite. Wine [consumption] goes up to 90,000 jugs a year, and as for flour, maize, wheat, barley, potatoes, chuño, vegetables, and fruits there is no

mathematician who could count it all. Of firewood they go beyond 500,000 pesos' worth a year, and charcoal, 300,000. And in the transport of ores they consume each year more than 30,000 llamas. And of boards and wood to outfit the mills they expend 30,000 pesos. To conclude with what is spent here, many longtime residents of the villa assured me that they spent last Easter more than 100,000 assayed pesos on colaciones, sugars, sweets, conserves, delicacies, wines, y convites y cenas, and there is not even a week in which more than 20,000 [pesos' worth is consumed] of chicha alone. And it is worth to the Indians who go about collecting in the streets and corrals the excrement of men and animals each year more than 30,000 pesos, which seems an incredible thing to anyone who has not been in that villa. And it also appears that the water fountain they call 'of Castile' because it is sweet and flavorful and most healthy, the same which is in the stone paved section of town [el empedradillo] and has four waterspouts [canos de agua] cost in bringing it from outside town and constructing it, more than a million [pesos]. This paved area is next to the main church, and it was the first section paved, and it encompasses the whole side of the square upwards, and to a corner which falls into Merchants' Street on one side and on the other the little plaza of the hospital and the [indigenous women's] fruit market, and it is full of confectioners' tents. It has been the theater and center where ire has ordinarily had its throne and seat, since it is the place of greatest concourse in Potosi, and there take place the challenges, quarrels, stabbings, injuries, bludgeoning, affronts [afrentas], and deaths, and it is almost taken for a proverb in Peru to call anyone who is valiant and brave a 'soldier of the pavement' [soldado del empedradillo].

Aside from the main squares which are three there are twenty-nine other smaller plazas where all day they sell every manner of things y puede pidir human necessity and despite Potosi being eighty leagues from the sea it is provided with so much fish that some is left over, and sometimes even fresh, as if one were no more than one or two leagues [from the sea]. There are in this Villa extremely rich men who walk about midweek in a suit of brown broadcloth [pano pardo] as if they had no other to put on, because that is their style [porque asi se usa], and entering into their houses one finds them piled high with silver bars [lastrada de barras], and there is a mine owner who pays out in salaries, only to his servants [criados] more than eight thousand assayed [pesos]. There are also extremely poor men who lost out for lack of understanding [que se perdieron por no entenderse] or from gambling away their estates, or for not wanting to work, but in the end none die from hunger, and all told there is much good in this villa, and much almsgiving, and pious and charitable works that are done. Because they give each year in alms more than 100,000 pesos, [but there is also] much evil, from evil deeds they do in logros, usuras, and malos tratos, born of codicia, root of all evils.

And concluding on the grandezas of this imperial, illustre, and famous villa, about which news has spread to all the world no a querido la virgen sin manzilla abogada de los pecadores que en ella falten sus regalos e intercessiones because there are images of her that have shone forth with famous miracles: that of Our Lady of Mercy who in the mountain has brought out Indians upon whom a mine had collapsed, it being impossible to save or extract them; And that of Copacabana has done this another two or three times. And Our Lady of Guadalupe likewise, and the Virgin of the Rosary who has performed many miracles in the villa, and that of the Immaculate Conception, and that of La Piedad

which is in the same convent of Our Lady of Mercy who has done two most bona fide ones [dos patentisimos]; and thus they are six, the images that are held in highest veneration, and they have taken testimonies of them to glorify the Virgin, who in all the world grants favors and mercies to those who entrust themselves to her with all their heart, and to these Indians, as weak and miserable souls, she goes each day demonstrating how much she loves them and cares for them so that they may also confirm themselves in the living faith of her one and only son, Jesus Christ, creator and redeemer of men, and to forget their errors, sins, and superstitions, in which for so many centuries their ancestors lived and died, and the Devil will be finished, and will have to lose his dominion and lordship that he enjoyed before the Catholic Kings of Spain sent their preachers and ministers to convert such a number of souls as were being lost.

And with this there ends and finishes this general history and genealogy of the Inca kings, formerly of these kingdoms of Peru, and of their rites and ceremonies, and particularities of their cities, in honor of the Omnipotent God, creator of all things visible and invisible, and of Jesus Christ, true god and man, his only son, and of the most serene queen of the angels, Virgin Mary, patron and advocate of my sacred order of Our Lady of Mercy, redeemer of captives, and all that in this is written in this history be subject to correction by the holy mother Roman Catholic church, and to the opinion of whoever may understand it better.

Ad laudem dei omnipotentis et. S.V. MMP de Mercede Red. Capt. anno anati vitate dm, 1613.

6. 'How the mines of Potosí were discovered.' 1553. Selections from Pedro de Cieza de León, *Crónica del Peru, Primera Parte*. ed. Franklin Pease G.Y. Lima: PUCE Fondo Editorial, 1984, pp. 288-93.

Chapter CVIII: Of the wealth there was in Porco, and how on the outskirts of this town there are great veins of silver.

It seems, according to what the Indians say today, that in the time when the Inca kings ruled this great kingdom of Peru they extracted in some parts of this province of Charcas a great quantity of silver ore, and for that purpose Indians were put in place, the same which gave the silver ore they extracted to their overseers and [royal] delegates. And on this hill of Porco, which is near the town of La Plata, there were mines from which they took out silver for their lords. And they affirm that much of the silver that was in the temple of the sun of Curicancha [in Cusco] had been taken from this hill; and Spaniards have taken much from it as well. Right now in this year [1552 or 1553] they are opening a mine belonging to Captain Hernando Pizarro, and they affirm that it will yield each year por ansedradas? which from it they will extract [silver worth] more than 200,000 gold pesos. Antonio Alvarez, a householder of this town, showed a little ore in Lima taken from a mine he has here on the hill of Porco and it seemed to be almost entirely silver. And thus it was that Porco was formerly a most rich thing, and it still is now; and it is believed that it always will be. And in many of the mountain ranges surrounding this town of La Plata and within its boundaries and jurisdiction they have found rich mines of

silver. And it is taken for certain, from what one can see, that there is so much of this ore that if there were people enough to search it out and extract it, they would take out only a bit less than they get in iron from the province of Biscay. But without Indians to extract it, and the land being too cold for blacks and quite costly, this seems the reason why this great treasure is lost. I also say that in some parts of the district of this town there are rivers that carry gold, and very fine. But since the silver mines are richer they make little effort to recover it. In Los Chichas pueblos derramados (?) that are held in encomienda by Hernando Pizarro, and which are subject to this town, they say that in some parts there are silver mines; and in the jungles of Los Andes great rivers originate, and if they wanted to search for gold mines I am certain they would find them.

Chapter CIX: How they discovered the mines of Potosí, from which they have extracted riches in silver never seen or heard of in other times, and how because this ore does not run [i.e., smelt with a bellows] the Indians refine it using the invention of the *guayras*.

The mines of Porco, and others that have been seen in these kingdoms - many of them from the time of the Incas - have open and obvious veins from which they take ore. But those that were discovered on this mountain of Potosí (about which I now wish to write) not only did they not see the wealth there was, nor did they extract the ore until the year 1547, when a Spaniard called Villaroel walked by with certain Indians while searching out ore to extract, falling upon this great wonder that is ... grandeza que esta en un collado alto de la postura que aqui va figurado: the most lovely and well situated of any found in all that district. And because the Indians call the hills and high things 'Potosí,' it remained with the name Potosí, as they call it. And although in this time Gonzalo Pizarro went about making war on the viceroy, and the kingdom was full of disturbances caused by this rebellion, the flank of this mountain was nevertheless settled. And they built large houses, and many of them. And the Spaniards established their core settlement in this place, moving the seat of justice there, so much so that the villa [of La Plata] was nearly abandoned and depopulated. And thus afterwards they claimed mines, and on the heights of the mountain they discovered five extremely rich veins, which are called: Rich Vein [Veta Rica], Tin Vein, and another Centeno, and the fourth Mendieta, and the fifth Oñate. And this wealth was so renowned that Indians came from all the surrounding districts to this hill to extract silver, the site of which is cold, because next to it there is no [original Indian] settlement. And the Spaniards having taken possession, they began to extract silver in this fashion: he who had a mine gave to the Indians who entered there a mark [of silver per week as wages]. And if it was rich, [he gave them] two [marks] each week. And if one did not have a mine, he gave the lords encomenderos of Indians half a mark per week. So many people came to extract silver that the site appeared to be a great city. And by necessity so much wealth will have to go on growing or start to diminish. I say, so that one may know the greatness of these mines, that according to what I saw in the year of our lord 1549 in this site, the corregidor of this town and of that of La Plata on His Majesty's behalf being Licenciate Polo, that each Saturday in his own house, where the smelting was done and the three-key treasure chests were kept, and in [royal] fifths there came to His Majesty 30,000 pesos, or 25,000, and sometimes a little less, and others more than 40,000. And in extracting so much wealth that the fifth of silver pertaining to His Majesty amounted to more than 120,000 castellanos [worth of silver] each month

they said that only a little silver was coming out, and that the mines were not doing well. And this that came to the smeltery was only the ore of the Christians, and not all that they had, because much was taken out in pancake-like ingots [tejuelos], to take wherever one wished. And it is truly believed that the Indians have taken great treasures to their lands.

And from this one may take as a great truth that in no other part of the world has there been discovered a hill so rich, nor is there a single prince of a single town - as is this famous village of La Plata - who ever had nor now has such rents and gains [provechos]. Just from the year 1548 to that of 1551 the royal fifths have been worth more than three million ducats, which is more than what the Spaniards found with Atahualpa, or what they found in Cusco when they discovered it.

According to what has been seen, the silver ore cannot be refined with bellows, nor can the residue from its fire be converted into silver. In Porco and in other parts of this kingdom where they extract ore they make great irons [planchas] of silver, and the ore they purify and separate from the dross that forms from the earth with the fire, having for that their great bellows. In this Potosí, although they have tried very hard to do it, they have never been able to do it with that [i.e., smelt the ore with a bellows]. The hardness [rezura] of the ore appears to cause it, that or some other mystery. Because great masters have as I said attempted to extract it with bellows, and their diligence has yielded nothing. And in the end, since men may discover a remedy for all things in this life, they did not fail to extract this silver by using an invention, the strangest in the world, which is this: In earlier times, the Incas being so ingenious, when they discovered silver ores in some parts that could not be refined with bellows, like those here in Potosí, in order to profit from the ore they made certain clay vessels [formas], of the size and type of an albahaguero in Spain, having all over it certain slits or ventilation holes. In these things they placed charcoal, and the ore on top, and placed upon the mountains or upon their sides where the wind was strongest, they extracted silver, the same which they purified and refined later with their little bellows or pipes through which they blow. In this way they extracted all this great quantity of silver that has come out of this mountain. And the Indians went off with the ore to the heights all around it to extract silver. They call these vessels Guayras. And at night there are so many of them among all the fields [campos] and hills [collados] that they seem like luminaries. And in times when there is a stiff wind they extract silver in quantity; when the wind fails, by no means can they extract the least amount. In the same way that the wind is needed to navigate by sea, such is it here in this place for the extraction of silver. And as the Indians have not had overseers, nor can one take them by the hand as they extract the silver, as they take [the ore] (as already said) to refine in the hills, it is believed that many have become rich, and carried off to their lands a great quantity of this silver. And it was for this reason that Indians from many parts of this kingdom have come to this site of Potosí, to take advantage. And well, there was for that such a great... pues abia para ello tan grande aparejo.

Chapter CX: How next to this mountain of Potosí there arose the richest market in the world in the time when these mines were in their prosperity.

In all this kingdom of Peru it is known by those of us who have traversed it that there are great *tiangues*, which are markets, where the natives exchange their things, among which in former times the greatest and richest was that of the city of Cusco, because even in the

time of the Spaniards its wealth was known for the great quantity of gold that was bought and sold in it, and for other things that were brought, all that could be had or imagined. But it did not equal this market or *tiangues*, nor did any other in the kingdom, the greatness [soberbio] of Potosí. Because so great was the trade that among Indians alone, not counting Christians, they exchanged in times when the mines prospered 25,000 and 30,000 gold pesos [worth of goods] each day, and some days more than 40,000, an amazing thing. And I believe that no fair in the world would equal the trade of this market. I made a note of it several times, and once I saw stretched out along a plain towards the main square of this town site a long string of baskets of coca, so much that it was the greatest wealth of these parts; and on another side rimeros of blankets and richly decorated shirts both thin and wide; in another part were great piles of maize and dried potatoes and other foods of theirs; not even mentioning that there were a great number of quarters of beef of the best sort available in the kingdom. And as they extracted silver every day, and these Indians are great eaters and drinkers, especially those who trade with the Spaniards, everything brought for sale was consumed. And thus they arrive from all parts with supplies and all things needed for its provisioning. And it is such that many Spaniards enriched themselves in this site of Potosí having nothing more than two or three Indian women working by contract for them in this marketplace. And [they come] from many places: there came great squads of vanaconas, which are understood to be free Indians, those who may serve whomever they wish; and the most beautiful Indian women of Cusco and of all the kingdom are to be found in this place. One thing I saw in the time I was there was that they made many trapazas, and by some they tratavan pocas verdades. And as for the cost of things, there were was so much merchandise that they sold Rouen woolens, broadcloth, and Dutch linens almost as cheaply as in Spain. And at auction I saw some things sold at such low prices that they would be taken for cheap in Seville. And many men who had enjoyed great wealth, not having satisfied their insatiable greed, were ruined in trying to move merchandise and sell. Some of them ran off to Chile, Tucumán, and other parts for fear of their debts. And thus all that went on were lawsuits and disputes that these had with each other. The site of this Potosí is healthy, especially for Indians, as few or none get sick in it. The silver is taken along the royal road to Cusco, or along the one to the city of Arequipa, near which is the port of Quilca. And the greatest part of it is carried by llamas and alpacas, such that lacking these only with great difficulty could one get around or engage in trade in this kingdom, due to the great distances between one city and another, and for the lack of beasts of burden.

7. 'Of the Hill of Potosí.' c.1605. Reginaldo de Lizárraga, *Descripción del Perú*, *Tucumán, Río de la Plata y Chile*. Ed. Ignacio Ballesteros. Madrid: Historia 16, 1986, pp. 222-33.

Chapter 100

Of the Mountain of Potosi

Returning to our province of Los Charcas, tired of treating of the more than barbarous Chiriguana people, this province is wide and long, and yet sparsely populated and quite rugged, with bad roads; the Indians are rather better looking than those of El Collao,

more robust, their faces fuller, and in their dress much better made, speaking generally; they are known by their dress, and are very rich in silver and cattle, although in cattle those of Callao have the advantage, and gold they do not lack, except that they do not want to discover it; it is known to exist in the Chayanta district, not in rivers, but in veins, but they keep it to themselves, and it does them no harm.

The Viceroy Francisco de Toledo sent from Potosi one of our friars to accompany a yanacona who promised to find him a mine; he went and found a poor vein, although he brought back a stone run through with filaments [clavos] of gold; it was taken for a thing that could not be pursued, and thus it remained. It is also commonly known that between Potosi and Porco, which is eight leagues, there are mercury mines, and it is not difficult to believe; it is just that he who knows it does not wish to reveal it, saying that after he does so they will take it away, so it stays this way for all; should this be revealed, His Majesty would greatly augment his tributes because mercury by necessity drops down, and it is not necessary to follow a vein, but rather work by open pit on the mountain, and as costs would be lower and miners more numerous, the quintos would have to go up; but this is already to go outside our intent; let us leave it to the [royal] accountants.

From the city of La Plata one arrives at Potosi after eighteen leagues, divided into three legs [jornadas], in which there are five inns, and in the first leg two rivers; the first is called Cachimayo, which is to say River of Salt, for the salt that forms in some places where it runs, such that all one needs to do is toss some of that water in the designated spots and within a few days it congeals, and good salt, as the water is not too thick [gruesa], nor brackish or briny. The other is the Rio Grande, but only in summer must one ford it, and it is worthwhile to know where to ford, because if not, whoever wants to ford it will keep going all the way to the Chiriguanas. It has its stone bridges which were ordered made by the famous [viceroy] Marquis of Canete, of happy memory, the elder; the first of the Achimayo; for lack of care by the justices the river swept it away when a flood came; they are trying to make another a league and a half farther downstream which has taken longer to build than the other two, which were made over two summers; this one has already taken more than six.

[The mountain of] Potosi is in the form of a sugar loaf;

8. 'Of the richness of silver ores in this province...' Lic. Pedro Ramírez del Aguila, Noticias políticas de Indias y relación descriptiva de la Ciudad de La Plata metropoli de las Provincias de las Charcas y nuevo Reyno de Toledo en las occidentales del gran imperio del Pirú. 1639. trans. Jaime Urioste Arana. Sucre: División de Extensión Universitaria, 1978, pp. 81-101. The original ms. is in the Lilly Library, University of Indiana.

Of the richness of silver ores in this province, and other precious stones, and of how these are worked in the Villa of Potosi. Its description and greatness and of the commodities traded in this city and province.

It is a known and understood thing in all these kingdoms and all foreign ones, that these provinces of Charcas, Porco, Lipes, and Chichas are the richest of all these [kingdoms] and of all the world in silver, and one may say without exaggeration (encarecimiento) that they are shot through (lastradas) with silver and that what has been taken from them has enriched the world, and that which Potosi has given alone cannot be counted. To explain the greatness (grandezas) of that mountain and villa would be impossible without resorting to copious books and long discourses, which I will leave to others who with greater certainty will have made their description ex profeso. Only in general will I refer to a few so as not to leave this point truncated.

Potosi, in terms of trade, exchange, communication, and concourse of people, is the emporium of these highland provinces, and outside Lima it is the most populous city in these kingdoms. The inhabitants of that villa, it is commonly agreed, number just under 100,000 souls of all estates: Spaniards, Indians, blacks, and all the nations of the world. Its location is at the foot of the mountain called Potosi, a name that was given it because the Indian who discovered it was called thus, and his discovery took place in the year of the incarnation of Our Lord 1544, in an inhospitable site, rugged and rocky, dry and barren of all greenness of grass, flowers, and glens, because none of this [plant life] survives due to that extremely cold climate, much beaten by northern and southern winds, which are commonly called tomahabes, since the coldest of them come from certain punas near the town called Tomahavi. It [the Villa of Potosi] was founded there for the ease of working the ores, where the engines for milling and refining could be close by, these built alongside a gulch and creek between the mountain and town, where they have made a river-front (ribera) of those mills, which including those shut down by [visitador] el senor don Juan de Carvajal y Sande, still number more than one hundred, right next to one another, which run from the start of [the canal of] El Agua de Castilla to where they terminate in Antomarca, taking up a space of one Castilian league, in which there is so much machinery, trafago, and noise of Spanish overseers, refiners, carpenters and Indian apiris, morteros, palliris, repasiris, and other tradesmen that it is the greatest in the world and much to behold.

The constelacion [astrological location] of that villa is healthy, since although the climate is cold and dry the soil is moist, as the whole thing was once a swamp with much water and so interconnected (y coligese) that one may dig anywhere into the surface of the soil, such that there are many wells with ample water, bad to drink but good for the animals that fatten themselves much with it. Its [the city's] layout is all on a slope, and in places it is steep; for this reason and due to the constipation of humors and heat of the stomach, for those who first arrive there find themselves short of breath and in order to not suffocate (ahogarse) must go up hill only little by little.

The living quarters of the Spaniards are in the heart of town and the Indians live in their parishes assigned and divided up by Viceroy don Francisco de Toledo when he visited that site, according to the Indian nations and provinces that come to work in the operation of the mines and mills, who are most numerous, since they are from all those found from Cuzco down this way and onto Tucuman. From each one there comes an Indian captain and governor, with their caciques and curacas, from their ayllus, to hand over each one

their Indians to the mine administrators and owners of mines and mills according to the official allotment and grant made to each one, this being done with great accord and attention to services by the viceroy of these kingdoms. These caciques and Indians move each year in their round (remuda) or turn, which is called mita, which is the batallon of hardships, apremios, and extortions they heap upon these poor Indians; the Spaniards have an interest in getting their Indians handed over, the Indians have theirs in not being handed over, due to the impossibility they have in that since those assigned have run off, in which there enter in a thousand injustices in the form of substitute workers and others paid in silver goes directly into the purse of the mine owners, paid and quitted, sometimes by force by one who does not owe it; and with this obfuscation y revuelta de trampas y cambalaches one with another, they always carry on with continuous lawsuits; and practically every Monday one sees in the stocks in those plazas the caciques, and "in deposit" the wives of the Indians, and "in hock" the children of those in jail or missing, along with all the Indians en masse for the mita in an eternal chaos of confusion, fighting, and labors.

On the flanks of the great mountain of Potosi is another smaller one that appears to be its offspring and it is its son, called Guayna Potosi, which is to say Potosi, Jr. At the base of this Guayna the entire "machine" of these Indians assemble each Monday for the start of each work week; Here meet the corregidor, the veedores, the mine administrators and intrested parties and all the mita captains who must hand off their workers and all the Indians who must then work; it is an army that which assembles there of more than 8,000 or 10,000 persons. In this muster they spend the whole day, and there the Indians sit drinking on the ground or on the wheels or millstones (muelas) of the various canchas, which are corrals, all divided by nation; and the muster completed with all the Indian bar men (barreteros) and apiris, who are those that carry the ore out of the mine, begin to climb up the mountain, beginning about four or five in the afternoon, very slowly, the majority of the Indians drunk or buzzed (azorrados) from the chicha they have drunk. They work the whole week, night and day, some 300 or 400 statures underground, more or less, according to the location; once placed in their work they carry it out with such gusto and merriment that they seem to be in a fiesta. The deadly risks of these mines are most numerous, from falls to live burial when pieces of the mountain collapse, such that many times it has occurred that 200 or 300 are buried, and only by the force of many miracles performed by Our Lady on their behalf have they escaped, but ordinarily there are broken legs, deaths, and despedazados; and even when great care is taken to maintain the mines and with great penalties levied against the mine owners who by their fault and carelessness a mine collapses, it is impossible for there not to be disgraces since the mountain is mined by infinite parts by adits, mines, shafts, faces (frontones), suyos and pits, that it is like a harnero or sieve (criba). The Indians who have ordinarily worked, day and night without stopping, in the entrails of this mountain - barreteros, apiris, and palliris, number some three, four, or five thousand, for the ninety-six years since it was discovered; they go inside on Saturdays on the night of their work in strings with their little lamps (candelillas) lit, which are visible from town and appear like religious processions. On Sunday mornings their parish priests gather them together for doctrine and to hear mass, by their fiscales and guatacamayos, which are bailiffs (alguaciles), for which they suffer much because they are drunk or asleep for lack of rest from the

previous nights of work and vigil, and although the priests try to make them comply with the duties of their office, it is impossible to get them to make up for the many shortcomings found in all this.

After mass they go to receive their payments which the mine owners place in their own hands, and later they go to drink it all up and spend it. Each mita Indian (indio de cedula) is paid each week two and a half pesos, and if he is a free hire (alquilado), which they call minga, it is seven and a half pesos of eight reales. These poor men have no other relief than to drink, such an irreparable vice among them that it either kills them or it has to be allowed to them as they do without the remedy of mending (? o se les ha de consentir como se hace sin remedio de enmienda); as punishment, they spend all they gain in this, especially those who work in that villa [of Potosi].

The parishes and churches found there are the following: the main church with three priests for Spaniards, two for "piezas," which are blacks and yanacona Indians in the service of Spaniards, two sextons, and 100 extra priests (sacerdotes clerigos sobresalientes) who live each day on a pittance of 2 pesos each. All these ministers are sustained by the obventions that fall to them (as they do not have tithes), and these are so substantial that each Spanish curate is worth more than 3,000 pesos, and those of "piezas" a little less than 2,000 pesos, and the sacristies (sexton posts) more than 3,000 pesos, which is more than the curates. The main church's construction is very rich, with a nave covered with cedar latticework, arco toral, and four side chapels, and with three portals of stonework, very richly worked and of great beauty and cost. The toral and that of the chapels of Santa Ana and Las Animas, which are to each side, are all gilded top to bottom with great curiosity and art, and likewise the chapels. The retable of the main altar is among the best of this kingdom and even of Spain, of a cost of 50,000 pesos, and this while still lacking its last part. The Sacristy is most sumptuous and very rich in worked silver ornaments. The service of this church, the authority and majesty and greatness with which they celebrate the divine offices and feasts, particularly that of Corpus and renovations of each month, is without doubt the greatest in the world, and the numberone parish in it, as regards the concourse of priests and townsfolk, devotion, sermons, masses, and administration of the sacraments. The expenditure on wax is the greatest known, such that there is nothing like it in all of Spain, even in its richest cathedrals. There enter into that church each year in obventions, alms, masses, and confraternity payments more than 40,000 pesos in cash reales, without collecting a single rent. The church has a fine tower with many bells, and an excellent choir and baptistry; in the cemetery is a large chapel of Our Lady of Copacabana of the Indies, expertly adorned, and in the part that faces the plaza, by two angles, many merchants' shop fronts, the rents of which pay for construction. The hangings, pictures, and paintings in the church are most rich and of great price and value, for the whole body of the church, of velvets and golden fabrics, many large and very rich silver lamps in all the altars and chapels; on the main altar there are three, the one in the middle having cost 12,000 pesos and it is so large that it cannot be raised and lowere except by winches made specially for it; the monstrance is of very fine silver and very large, of a curious working and architecture, with a price of 30,000 pesos; and as of silver, tabernacles, quiones y frontales all of plata maciza, it is much that is kept in that church and throughout the villa. The church has

thirty yanacona Indians who serve as minor sextons, acolytes, monacillos, porters, perreros, bell ringers, barrenderos; and there are many other qualities and features of greatness such that it would be prolix to refer to them all in detail. This is the only Spanish parish in Potosi.

There follows in second place San Lorenzo de los Carangas, a very fine church and rich with retable, ornaments, worked silver, paintings and wall hangings, and Indian parish; in third place is the church of Santa Barbara; in fourth that of the Conception of the Mercedarian friars; fifth is San Pedro, of the Dominican friars, which houses an image of Our Miraculous Lady in an most richly outfitted chapel, for whom there is much devotion in that villa; in sixth that of Santiago; in seventh that of San Pablo; in eighth that of San Bernardo; in ninth that of Copacabana, where the image of this advocation is housed, of many miracles and based on a very grand confraternity of Spanish miners; in tenth that of San Juan; in eleventh that of San Francisco el Chico, as they call it, of Dominican friars; in twelfth that of San Cristobal, of Mercedarian friars; in thirteenth that of San Benito, with a very rich church curiously adorned thanks to the great diligence and devout vigilance of its present priest, maestro Hernando Diaz, creole of this city, mirror of priests in pious zeal, saintliness, doctrine, comiseration (miseracion) with his Indians and generosity with the poor, a person worthy of all praise and reward; in whose parish he supports an enclosure of devote Indian damsels, where they keep themselves to serve God in the manner of a convent with its chapel and mayor who governs them in their cloister and enclosure; where I judge that they much serve Our Lord, and the Indian women apply themselves so well to this life, with such honesty, modesty, and devotion that they do better than the most spiritual nuns, and this should serve as the base upon which they are allowed to live in religion; in fourteenth place [among Potosi's parish churches], San Sebastian; in fifteenth that of San Martin; which in all make up the fifteen parishes named for the ancientness they have in the processions, over which giving out and conserving it there have been great debates and lawsuits. The one is for Spaniards. the other fourteen for Indians; of these four are of religious orders, and ten with secular clerics. All these parishes have good churches and temples, with fine service of ornaments and worked silver; in all is seated the Most Holy and they perform great fiestas at Corpus and the feast days of the confraternities, which in each parish number seven, eight, or ten, to which the Indians attend with much affection and devotion without mentioning expenditures in silver; it is such that a single Indian spends on the lietenancy (alferazgo) of these confraternities 200, 300, 500, or even 1,000 pesos, which although it is ordered in the constitutions of the synod that these costs be excused, they themselves want to do this volunarily without anyone ordering them, as they say it is an honor and the same is known in their villages.

There are five monasteries: of Santo Domingo with its church and nave, with crucero and chapels, very costly and rich, covered in cedar latticework and the same above the choir, with great richness in ostentatious retables, hangings, ornaments and worked silver. The monastery (casa) is not yet finished. There are supported there some thirty religious, rather more than less, by ample alms.

That of San Francisco has a very lustrous and rich church with a nave covered in cedar, of gilt latticework and pine cones (pinas) and artesones, with many and rich chapels. Its adornment is most costly and rich in paintings, retables, hangings, lamps, ornaments, and worked silver. The monastery (casa) is very good, with a very costly cloister with stone arches and pillars. Supported there are forty religious, sometimes more and at other times fewer, on alms and chaplaincies.

The monastery of San Agustin is of the same luster and size, very rich in church and monastery, with twenty-four or more religious. They support themselves very well with alms and chaplaincies.

That of La Merced is of equal cost and richness in terms of church and monastery. It supports more than twenty religious with alms.

The Jesuit colegio in in whole and in parts a church and house of the most grand, which exceeds the rest, as it has many rents to sustain it, it ordinarily has in it thirty subjects.

There are two hospitals, the Royal One, for Indians and Spaniards, very rich and with many rents, whose foundation and expenditures have been written about carefully by a person by whose hand has passed with all satisfaction and truth, to whose relation I refer. The other is of San Juan de Dios, which is supported by alms, with a good church and house, and in which they cure some ill persons.

There are other shrine chapels (ermitas) on the Cerro, one on Guayna, another by the reservoir of Cari Cari, another for San Bartolome in the Narrows (la Angostura, below town towards Tarapaya), another at the foot of the cerro, next to Santiago, for San Roque.

All these churches are well built and very well adorned, and all the rest of the parishes have their Indian cantors and minstrels, and in the main church a very good and excellent chapel of Spanish cantors.

The concourses in the festival processions are very grand; the greatness, devotion, and richness of their celebration is the greatest in the kingdom, because there are gathered its richest in jewels, silver, gold, hangings, paintings, and all that which is of greatest richness and curiosity. There is generally in that villa much devotion and much affinity for the things pertaining to the divine service and they give tremendous alms, not to mention other costs that may seem superfluous, so much so that there are those who give three, four, eight, or ten thousand pesos in alms as if it were a real; as that place generates (cria) some souls of magnanimous princes, bountiful (dadivosos) and liberal.

The outfitting of the people of that villa, the presentation (porte) and clothing, is the most costly, most elegant and courtly of these provinces, as much for men as for women, of which there are some very beautiful ones, both locally born and among the great many who go from this kingdom to search for their fortunes, so loaded with jewels and pearls, so wrapped in lamas and fine fabrics that each one seems to be a queen, and this is so

common even among the most ordinary that even on the mestizas and Indian women in their outfits one sees all this gala y bizarria.

The houses are very finely built, both upper and lower floors, although the majority are roofed with thatch, but this with such curiosity that one does not miss the tile. Their interiors are very rich and costly, with the adornments of wall hangings, desks, paintings, beds and estrados, the richest of the kingdom; the service of slaves, vajillas, and silver plate are of great value and much abundance, in which one finds many great sums of capital (hacienda) invested.

As for the supply of that villa, in terms of necessities and other commodities, it is the largest and most copious of these kingdoms; there lies the granary of all the best foods, the bodega for the fine wines of Arequipa, Ica, La Nazca, Pisco, and of those of these provinces; there they carry the best fruits, and they take there from here all about, and from 100 or 200 leagues away their conserves, plus fresh fish and that from the sea; there is the warehouse of all the commodities that travel to this kingdom, because since there is the fountain of silver and wealth, in entering that town each one will profit from what he takes to sell, with new reales in hand, and thus everything ends up there and there is a surplus of everything.

The greater part of the common folk is made up of unattached persons and of all the nations of the world, and from that region, and of soldados escoteros who go in search of a life, and as people without roots, nor more than the cape on their shoulders, in order to eat and make friends they foment factions, try to prove their valor, divide themselves into parties by nation, confederate themselves according to diverse opinions, such that there are always disputes, wounds, and deaths. Not everything here can resist the power of the magistrates, no embargante, as there are many and very vigilant and and they carry out extraordinary punishments, as one may see with one recently done, in which for one murder seven were hanged; but in spite of this, not a month ago, don Juan de Cespedes, a town councilman of that villa having gone to apprehend a criminal, was given so many wounds he died, and they fired at the lieutenant corregidor with an arquebus at midday, killing his horse as well as a bailiff; and other similar things happen each day. At night, one may not leave home safely without risk some mishap; not long ago they tried to evict the rootless folk, but the next day they woke up to posters all around saying they should not attempt this or the whole place would be burned to ashes, and thus the order was not carried out despite having been issued by the vicerov.

The "Empedradillo" (cobble-stone square) is famous in that town; it is a space that makes a block on an angle from the main plaza, just above it, well cobbled and in view of the rest, of the width of a street likewise paved, to which is attached like a facade a whole walkway along that block with hat shops, to which for the afternoon sun, and for shade at midday, is the greatest concourse of the whole plaza, and it is always full of people. On that spot there have been many murders and fights, and likewise they consider it the asylum (asilo) and space for bravery, and thus circulates the proverb that a man is not truly valiant if he has not walked the Empedradillo of Potosi.

The number of houses of Spaniards in that city is four or five thousand, that of the houses of Indians, which are mostly small, low, and covered with ichu grass, some twelve to fourteen thousand.

There are many fountains throughout the villa bringing water piped in from far away; there is not much lack of it despite not having a river or creek full of it to drink.

The four or five reservoirs they have constructed so as to mill ores year round in the refineries, which rely on water power, is a grand thing to behold, having cost many thousands of pesos to put them in the state they are now in; of which mention was made on this particular in the relation I noted and thus I excuse myself.

In that villa is located the storehouse and deposit of treasury of His Majesty, which collects from all these provinces the quintos, mercury sales, tributes, sales of office, sales taxes, indulgences (bulas), unoccupied episcopal rents (vacantes de obispos), donations for the king's wars (donativos), forced pledges (graciosos servicios), and other things, with a very grave tribunal of three royal officials: factor, contador, and treasurer, jueces privativos of the royal treasury, from which the greater part of all that goes to Spain, and they also pay the salaries of the Audiencias of Lima, this one (Charcas), and Chile, plus those of governors, corregidors, and many priests among the Indians, which amounts to a great sum of money. They have there some very magnificent and ostentatious treasury buildings with living quarters for all the ministers, who are many and who make very great salaries. There is the smeltery for bars, in which they smelt each year from five to six thousand bars, of more than a thousand pesos each one, of which one fifth pertains to His Majesty.

Likewise there is a mint in that villa, quite grand, run with great labor and bustle by royal employees and black laborers, under charge of a royally appointed treasurer with jurisdiccion privativa within it, this being an office of very great consideration and which is worth each year more than 8,000 pesos in rents. They manufacture there millions in coin each year in reales de a 8, de a cuatro, de a dos, sencillos, y medios reales, which is that which circulates in all these kingdoms and not any other of vellon.

The government of that villa is by one corregidor, two ordinary councilmen, a provincial of the Hermandad, an alguacil mayor, the town council, very grave and authorized, of 24 veinticuatros, whose offices are sold at ten or twelve thousand pesos ensayados and beyond this many lesser offices. The corregidorship is among the best posts in the entire kingdom, with a salary of 3,000 pesos ensayados and the power (mano) to make 100,000; his main title is as corregidor of this city of La Plata, where he is obliged to live six months each year and the other six in Potosi; but he is never here [in La Plata] due to the many things he has to do in that villa where he also has his lieutenant, and he is also captain-general of all these provinces, with jurisdiction over that of all the other corregidors in matters of the mita, for whose shortcomings he may apprehend, punish, imprison, and send other corregidors, it is a post that grants him regency as great lord and entitled.

I will put a period on this description of the Imperial Villa (titled thus by privilege and merced of the emperor) de Potosi, giving way to others that have been done more copiously and certified, by saying that that machine is un epilogo, una cifra y agredado de grandeza y riqueza y que puede frisar con la Octava Maravilla, and the most useful, beneficial, and most important place for the service of its king possessed by any prince or monarchy in the world, as it alone enriches him and serves him more than others are by an entire and very powerful kingdom.

Taking the discussion to the description of the other mineral deposits of these provinces, I shall say that the one at Porco, which was first before Potosi, was extremely rich in its beginnings. It is seven leagues distant from Potosi, and there is where the Pizarros stayed: Hernando, Francisco, and Gonzalo Pizarro, and one may see the ruins of their houses sown with salt, and where their grandezas had their beginnings, great fiestas and games of canas, their horses shod with shoes of silver. That camp is now exhausted because the mines hit water, although not for a lack of trying. That camp has 500 mita Indians (indios de cedula) yet there is only one mill in operation, the rest having been abandoned and fallen to ruin.

The mineral deposits of Oruro, Turco, Berenguela, Berenguelilla, Yaco, San Pedro de Buena Vista, Choque Cayara, Maragua, Guariguari, San Cristobal de Lipes, Santa Isabel, Chorolque, San Vicente, and the new discovery of Tomahavi, are all wasted and poor, along with those of Piquisa, Colavi, and Turusnachi; and they just sustain themselves by fits and starts, now dead, now resuscitated, but there is never a lack of effort in them, so as not to lose the mills that have been built in each, and these are sustained by poor yields of forty or fifty pounds, which in the end are of some importance, because many small streams make up the great river of Potosi, for which all are tributaries and all enter.

The mineral deposits of Chocaya, so famous in these times, are already much diminished as the mines have hit water and it is too costly to drain them, even when in very rich ore; some five or six years ago, not long after their discovery, they were so famous and held in such high regard that Potosi itself was nearly abandoned, being thirty leagues away, and the place was populated with such haste and urgency that within one year there emerged and was formed a town of 2,000 inhabitants, with all the great noise of the mine works, plus commerce and contracting. This is now all cooled down (resfriado), and although the town is still there all the people went back to Potosi, it being no small thing to return from the land of promise (? que no le importo poco para volver del parasismo). The mines of that camp are still worked and a drought is hoped for so that the water might recede, because this winter has been quite rainy and has caused much flooding in the mines.

The main trade of all the Spanish persons who come to this land and live in it, the most rich, noble, and gentlemanly, is that of being a "minero," and nearly everyone tries to prospect and work mines, since this land is so rich in them and one can become rich so quickly in finding them, many try in this way to search for improvements and even the most principal persons engage in this, because no one, although it is much [work], looks down on entering a mine with a famulia (which is a small hammer) to take out the ore

one may; nor to prospect on the hilltops, nor to follow the veins. To locate these veins is a gift of God, which he gives to whom he pleases, and to work them is the most noble trade as the fruit of this labor is the best of all in the land; this is not a damaging occupation, as is does not preclude the working of planting and agriculture, nor the utility of commerce, rather it foments everything and with it things grow find an outlet and sales of all products increase, such that silver reaches all hands and everyone gets rich. In Italy, Germany, and other northern parts, although there are many mines, they may not be worked freely for reasons of state and the policies that are there judged convenient, so as not to impede the working of the land and other things that they have carefully thought out, but in this province all activities would cease and your Majesty judges them [the mines] as necessary for the aid and preservation of his estates, and thus orders and charges his governors to make folks search out and work mines and give much honor to those who understand how to do this, granting them the privilege of hidalgos and keeping them from being imprisoned for debt, and making certain their mines and mills and materials will not be sold off to liquidate them; such that the miners and azogueros, who are those who have a mill, are much encouraged and are valuable to the royal service, more than so many other vassals he has in his realms, such that only one azoguero may yield to the royal treasury, in quintos and mercury purchases, more than a city, reaching as much as 80,000 or 100,000 pesos, and they make loans of 50,000 up to 100,000 pesos for the dispatch of the annual fleets, which they pay punctually; and in the pledges and "gracious donations" it is they who participate, as all these are very considerable services and worthy of the favors and exceptions given and conceded to them.

Each day one sees in this land great entrepreneurs (grandes venturones) in the matter of getting rich by mining, and he who yesterday was shirtless has tomorrow 500,000 pesos and the grandeza of a great lord, although we have seen that within a short time many lose out due to vanities and excessive spending during their prosperity. The asogueros comport themselves like great lords in terms of the lustre of their persons, houses, and families, and their spirits as generous as powerful princes. There are azogueros who have weekly expenditures of 7,000 or 8,000 pesos in cash reales to maintain their houses and the credit of their mines and refineries, and that produce forty and fifty silver ingots [pinas] each week, each of these weighing 40 marks, worth some 250 pesos. Many covet these ingots and the interest that comes from them, since for each one sold to make bars one earns 12 or 14 pesos, and they make deals with the azogueros such that they give them all the ingots they produce in exchange for payment in reales for all weekly expenses. Yet it is not just anyone who can serve as creditor for these, since as expenses are certain and the ingots uncertain, the azogueros are always indebted to the creditors to the tune of 50,000 pesos, and some up to 100,000 pesos, such that in their whole lives they will never see themselves clear (zafos) or free of them, because many azogueros do not comply as agreed in their contracts to give over all ingots produced, hiding some to cover their extraordinary expenditures. There are others who are more stable, who fund themselves, and these are greatly enriched and go about with great surplus, and who do not purchase mercury on credit but rather pay up front.

The souls this silver inspires are extraordinary, and their machines like nothing seen before, and each day they dream of becoming lords of the world. There was an azoguero

in Potosi who said: "The Pope in Rome, the king in Spain, and Domingo Beltran in Potosi," as that was his name. There are azogueros who buy 500 pesos worth of shad, a thousand pesos worth of apples, 2,000 pesos in fish as if spending only four reals, and who have 50,000 pesos spent on provisions and more; another who, for having his suit properly fitted, gave the tailor by way of thanks a chest full of ore, which yielded 8,000 pesos and allowed him to go home [to Europe]; and other magnanimous acts of this sort and many, such that they have supported many "soldiers" and poor folk. There is an azoguero right now in Chocaya, Gonzalo Diaz Montero, Portuguese, who in three years has given more than 200,000 pesos to his friends, the poor, and the needy, all graciously; and he gave as alms for one mass 2,000 pesos, and to his godsons, priests, 1,000 pesos and more, and he has performed other grandezas worthy of a prince, which he is in his way of being, his magnanimity and largesse. And of this sort there are and have been many persons who have traded ostentatiously, eating to the sound of bagpipes and entertaining 30 or 40 guests at a time, serving them on huge silver table ware. Francisco de Villalobos, whom they called El Rico, lived in Porco where he had his properties and mills, and when he came to Potosi his wife sent food to him cooked in Porco, and it arrived in Potosi hot, even though Porco is seven leagues away, pues es materia de fuegos, son gruesisimos los suyos (?). Diego de Aviles, an azoguero in Chichas, played pintas in Potosi at 1,000 pesos a hand. Pedro de Mondragon bet a working mill head, worth more than 70,000 pesos, on a game of roulette (suerte de perinola) with Juan Porcel de Padilla, who exclaimed: "I say!" and before the roulette wheel stopped, it was stopped (la barajo) by don Pedro Zores de Ulloa, who was corregidor of Potosi, who happened to be present, and he said: "Play, your mercies, for silver, but do not wager your honor." These same men, and many others, played for 10,000 or 12,000 pesos, to see who pulled the longest straw from the roof of a house thatched in ichu grass. These and many other crazy things, that here may included among so many expenditures, have been done and are still done by the azoguero and other rich men in this land, due to the great surplus created by the mines, and many of these same men have been known to die in the hospitals extremely poor; and one may see an azoguero who has 200,000 or 300,000 pesos of debt spending as if he had them all to waste and he suffers for it and the earth takes him. (y lo sufre y lleva la tierra).

The exhalations of this silver breed such grandiose thoughts and such ardent spirits that one may see one of these miners, with his bare outfit of rough cloth, mal trapillo, so maquinista and rich in his belief as if he were a Midas, a greater and more valiant gentleman than El Cid, without taking account of anyone for any reason, and not permitting anyone to attempt to get the better of him, because the equality of this land is such that there is no master who dares to treat his servant with anything less than great respect; they are all gentlemen even as they die of hunger. It happened in Potosi that a principal individual, a rich mill operator named Juan Ordonez de Villaguiran, who because his majordomo, one Gongora [illegible], mistreated some Indians in his presence, he pushed him back (le rempujo) and put his hand on his face and told him never to do such a thing again in his presence, a thing felt so keenly by the servant that he left soon after and took to trying to kill his master by ambush (en acechanzas) for more than six years, and when these were up, upon passing down the street at midday, [the servant] hidden in a merchant shop fired a pistol at his master and pulled out his sword and gave

him a mortal wound, from which he died the next day. They apprehended the servant and while taking him to be hanged the same day for this crime he gloried in the great deed he had done with this stabbing, and he did not want to confess until he knew [his master] was dead, such that so that he would confess as the foot of the gallows it was necessary to falsely ring the church bells so that when he asked, "for whom do they toll," they said for Juan Ordonez de Villaguiran, and thus when the criminal heard this he was much contented and said: "God forgive you," and what an honored man he was, and with this he confessed and was hanged. I saw in the royal treasury building of Potosi, in the time of the vicunas, there being holed up there don Felipe Manrique [the embattled corregidor] with a guard of 200 men, he being general, ordered a soldier of the guardian corps to carry out a certain errand, telling him: "Go do this." And the soldier felt this so strongly, what the general said of him, that he responded that he was not such a person who should be treated in that manner, and that he must be treated well, and he let out other shouts (roncas) that left us with no other means of getting the good gentleman to calm himself and those of us who were with him. This equality, presumptuousness, and spirit is caused by the generosity and richness of this land, and such a great discovery in it, that even those who return to Spain long for it, and they come back as we have seen on many occasions; what is certain is that it is the mother of foreigners and a great provider for all, and if here one finds friends, comforts, capital (caudales), rich marriages, and many great fortunes, and "Ubi bonum ibi patria" says the proverb that describes the goodness of this land and the magnetism of of its constellation. There is no Spaniard here who serves as a lackey or page, except to an archbishop or [audiencia] president, since these jobs there serve instead blacks, Indians, or mestizos.

There are many gold-bearing mineral deposits in this province, rivers and creeks where they wash and recover many very fine nuggets, but they are not worked except in Guanacani and the Andes [eastern lowland] jurisdiction of this audiencia jurisdiction, since there gold is more copious, and because in this kingdom there is more wealth and promise to be had in working mines of silver, such that a silver mine is worth more than one of gold, the opposite of what occurred in Jerusalem in the time of King Solomon, where the Holy Bible says, Kings 3:10, that there was no silver nor was it esteemed as a thing of value in the days of Solomon: "Non erat argentum, nec alicuius pretii putabatur in diebus Salomonis," although there was plenty of it in Jerusalem, common as rocks, as noted in chap. 9 of Book 2 of the Paralipom: "Tantamque copian praebut argenti in Jerusalem quasi lapidum," pondered so wisely by the lord Dr Juan de Solorzano Pereira in his most erudite treatise De Indiarum Jure, book 1, chap.13, No.63, in order to prove that the most wise king [Solomon] was the most powerful and rich who ever was and ever will be in any century, and reducing to account that of those times and the immenseness of their riches, it is said at the end of the number (that of Pineda, De Reb. Salom. Book 4, August Toseniell, in Annal. sac. tom 2. ann. 3043 n.4 p.46) that the treasures of King David were 123 million (units not given), and those of Solomon were ten times more, which would be 1,230,000,000, a seemingly innumerable quantity; but without exaggeration that Potosi and counting several others in this province, since its discovery 96 years ago has given as much to its king and to Spain; since it is certain that each year there have gone out of it, in royal as well as private purses, more than 12 million, from which one can approach the said sum, which for our sins are today enjoyed by foreign nations in emulation of the Lady of all [nations], which Our Lord has desired to be the most Christian Spain; and he laughs at some, the said Pineda (ubi. c.19), who in envy compare the riches of certain princes of our times with those of Solomon, as does Torre Blanca (in Epitom. Lib. de Mag. in defen. c.4) and that all the costs and expenditures on building and support of the temple of Jerusalem made by Solomon exceeded the riches of all kings and beyond all human admiration, as is also said in the writings of Arias Montano in his books, De Templi Fabrica.

There are also deposits of mercury of which many have been assayed on the spot and in many places they have found them very good, but since that of Huancavelica is so rich they have left those around here alone, although there is no lack of curious individuals who attempt to develop this process, which has been found extremely difficult in the ores located in this province. (goes on about PIGMENTS, medicinal stones, etc.)

9. 1641-42 satirical poem in *Memorial histórico español. Colección de documentos opúsculos y antigüedades*. Tomo XVI. Madrid: Real Academia de la Historia, 1862, pp.224-27. I first saw ref. to a part of it in Nicanor Domínguez's dissertation. He found that portion in Mercedes Etreros, *La sátira política en el siglo XVII*. Madrid: Fundación Universitaria Española, 1983, p.192. Neither author cites the source, which I assume to be this 1862 vol. containing mostly Jesuit letters and related papers. This found among early 1642 letters of Padre Rafael Pereyra, who really got around. Monjui is mentioned in accompanying letters, held by French in Catalan rebellion. On p.152 Etreros says the text dates to 1639, but she still doesn't cite a source, which leaves us perplexed.

Consejo de los Gatos

El consejo de los gatos Dicen se junta en Madrid, Unos para gobernar Y otros para destruir. Las armas para la guerra Han mandado prevenir, Ellos ponen los gatillos Y el soldado el esmeril. Y asi para Holanda y Francia Gatillos seran al fin Los que para España son Gatazos de mil en mil. A los soldados obligan En la campaña asistir, Con escudos de paciencia Mas que no del Potosí, Y que la espada no empuñen,

Porque empuñar y embestir Uñas abajo y arriba Lo reservan para si. Y ellos vuelvan las espaldas Al enemigo pais, Porque les vuelvan las uñas A su sueldo acá en Madrid. Y aunque de uña a caballo Todos echan a huir, A uña de consejeros, Que es lo mismo, así que así. ¡Desdichado del dinero Oue viene a dar en Madrid! Que ojos que le ven entrar No le veran mas salir. Y si preguntan la causa Solo les sabre decir, Que el consejo no lo sabe Y que el consejero si. Porque han dicho que el dinero Que viene a parar aqui, A consejos ha venido Y en consejos se ha de ir. ¿Que provecho nos ha dado Aquel cerro Potosí, Cuyo vientre ha sustentado Tanto hambriento bahari? Porque Holanda, es Poto, si; Porque se lo lleva Italia, Para Italia, es puto, si; Porque lo padece España, Para España, es potro, si, Y si algo nos ha quedado De aquel dorado Monjui, Es para este gran Consejo Chicha que se lleva el mis. Todos se comen las manos, Tras estos maravedis, Pero aquestos consejeros Las uñas tras un centi. Solamente panarizos Es la enfermedad de aqui, En que se mudan las uñas Ya cansadas de servir. Filipo, si de la Hesperia Te llaman sol, y es asi,

Despierta, que esta almorzado Y aun ensillado el rocin. Mucho duermes, y ya el Alba Lavada quiere salir, Por entre escollos, cristal, Por entre espumas, marfil. España, tu aurora bella, Querellosa esta de ti Venturoso, pues te aguarda, Ciego, pues la dejas ir; Y aunque se queja no puede Ni perlas, ni oro vestir: Perlas que las ha perdido, Oro que te lo dio a ti. La noche nos causa horror; Diganlo, cuantos aqui Hay cuantos, que en ella suelen Vestirse de bellori: Tan amigos de la noche Que aunque este en su zenit Por ser luz de garabato Usan de las del candil; Y si otras a pierna suelta Pesados suelen dormir, Estos a una suelta duermen, Porque es sueño mas sutil; Mas ya, aunque quieras, no puedes Las tinieblas oprimir, Que tus rayos son lagañas Y sombras de carmesi, Y tan tibia nos alumbras, Y te muestras al salir, Sol con uñas por neblina Y aun con uñas de nebli. Punto aqui que viene el alba Riyendose para mi, Sin hacerlo yo cosquillas: Consejeros a huir. Esto cantaba una noche En Palacio Juan Pasquin, El que solo es conocido Por su hablar y decir.

ayllu encomendero encomienda guaira guairador jornal minga, mingado negrillo paco peso corriente peso ensayado palla/pallar/pallay pella piña quinto real real repartimiento socavón soroche tacana(s) yanacona

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Agia, Fr. Miguel de. *Servidumbres personales de indios*. ed. F. Javier de Ayala. Seville: EEHA/CSIC, 1946. Franciscan's parecer written in 1601 for VR Luis de Velasco. Published originally in Lima, 1604, as three pareceres. Agia, born in Valencia, spent time in New Spain, esp. Guatemala, before going back to Madrid c.1594, then sent to Peru 1600 to visit whole stretch overland from Cartagena to Lima, then to Potosi. Thus he knows what he's talking about with Quito obrajes, sugar ingenios, vineyards, and mines. He admits that abuses are common, but ultimately he sides royal cedula saying that reform is needed, not prohibition or abolition. Some interesting notes on obrajes and Mexican mines, and Agia says he's working on long book on servicio personal (any trace?). Seems to argue argue against settling folks permanently near Potosi, speaks of (70) "toda la machina de Potosi." Not a lot of details on Potosi, but he has apparently been there, and says far fewer mitayos are working than in Toledo's day. Conclusion (102-5) is that king is justified in compelling native workers in Potosi and other mines: 'La justificacion y probanza de esta conclusion tiene su fundamento en la necesidad

publica y notoria que su Magestad padece, y en las urgentes ocasiones de guerra que tiene contra los herejes y otros infieles para exaltación y conservación de nuestra santa fe catolica, y conservación de sus reynos y senorios, y ayuda del desempeno de su real patrimonio, y otras causas de publica utilidad y provecho, y de mucha consideración, todas las cuales particularmente las de guerra parecen estar justificadas por el summo Pontifice Romano: el cual ayuda a su Magestad por la dicha causa con la santa cruzada subsidio y excusado. Y en esta real cedula viene expresada por su Magestad, aviendo precedido parecer y acuerdo de personas de mucha experiencia y conciencia: lo cual basta para la seguridad de la conciencia." Uses mix of Roman and Thomist claims to back him up. Says Huancavelica work is justified by Potosi's needs.

Archivo Historico Casa Nacional de Moneda. Catalogo del Fondo Documental Cabildo, Gobierno e Intendencia (1620-1825). Potosi: Fundacion Cultural del Banco Central de Bolivia, 2002. GREAT resource for someone looking for dissertation topic, e.g., crime in 18C Potosi. Some 17c possibilities, too, e.g., CGI 1136 (p.138) on 1666 case of enslaved woman branded on face.

Arellano, Ignacio, y Andrés Eichmann, eds. *Entremeses, loas y coloquios de Potosí (Colección del convento de Santa Teresa)*. Madrid: Iberoamericana/Vervuert, 2005. Some fabulous theatrical bits here, especially the entremés de los compadres, which has an Indian couple bantering with a black couple in a mix of Spanish and Quechua, both heavily 'accented' for comic effect. It's insulting but rich. Most of this is 18C, in part because convent dates to 1687, but a few pieces are known 17C Spanish works.

Arzans de Orsúa y Vela, Bartolomé. *Historia de la Villa Imperial de Potosí*. 3 vols. Eds. Lewis Hanke and Gunnar Mendoza. Providence, RI: Brown University Press, 1965.

-----. Tales of Potosi. ed. R.C. Padden. trans. Frances Lopez-Morillas. Providence, RI: Brown University Press, 1975.

Assadourian, Carlos Sempat. "La produccion de la mercancia dinero en la formacion del mercado interno colonial: el caso del espacio peruano en el siglo XVI." in Enrique Florescano, ed. Ensayos sobre el desarrollo economico de Mexico y America Latina (1500-1975). pp. 223-92. Mexico, D.F.: FCE, 1979.

Bakewell, Peter J. *Miners of the Red Mountain: Indian Labor in Potosí, 1545-1650*. Albuquerque: University of New Mexico Press, 1985.

Bakewell, Peter J. 'Technological Change in Potosí: The Silver Boom of the 1570s,' *Jahrbuch fur Geschichte von Staat, Wirtschaft und Gesellschaft Lateinamerikas* 12 (1977): 60-77.

Bakewell, Peter J. 'Registered Silver Production in the Potosí District, 1550-1735,' *Jahrbuch fur Geschichte von Staat, Wirtschaft und Gesellschaft Lateinamerikas* 12 (1975): 67-103.

Ballesteros Gabrois, Manuel. *Descubrimiento y fundación del Potosí*. Zaragoza, Spain: Delegación de Distrito de Educación Nacional, 1950.

Barba, Alvaro Alonso. The Art of Metals/Arte de los metales. Various eds.

Barnadas, Josep M. 'Una polémica colonial: Potosí, 1579-1684,' *Jarbuch fur Geschichte von Staat, Wirtschaft un Gessellschaft Lateinamerikas* 10 (1973): 16-70.

Barnadas, Josep M. *Charcas: orígenes históricos de una sociedad colonial*. La Paz: Centro de Investigación y Promoción del Campesinado, 1973. A monumental work based on the author's 1971 doctoral dissertation at the U. de Sevilla under Antonio Muro Orejón. A magisterial, Braudel-Chaunu type structural thing, with some v. useful appendices and a great bibliography.

Boxer, Charles. Salvador de Sá and the Struggle for Brazil and Angola, 1602-1686. London: University of London, 1952.

Brading, David, and Harry Cross, 'Colonial Silver Mining: Mexico and Peru,' *Hispanic American Historical Review* 52:4 (Nov. 1972): 545-79.

Brown, Kendall W. A History of Mining in Latin America from the Colonial Era to the Present. Albuquerque: University of New Mexico Press, 2012. Anchored in Potosi, and a great overview of its history is here, probably the best thus far.

Burzio, Humberto. *La ceca de la Villa Imperial de Potosí y la moneda colonial*. Buenos Aires, 1945.

Cieza de León, Pedro de. The Discovery and Conquest of Peru.

Cobb, Gwendolin B. 'Potosí and Huancavelica: Economic Bases of Peru, 1545-1640' Ph.D dissertation, University of California, Berkeley, 1947.

Cobb, Gwendolin B. 'Supply and Transportation for the Potosí Mines, 1545-1640' *Hispanic American Historical Review* 29:1 (Feb. 1949: 25-45. A nice conspectus of the topic based entirely on published primary sources, dealing mostly with mercury transport from Huancavelica but also ending with a few words on Buenos Aires. Has some good transport cost data from specific letters and relaciones.

Cole, Jeffrey. *The Potosi Mita, 1573-1700: Compulsory Indian Labor in the Andes*. Stanford: Stanford University Press, 1985. Uses long-running disputes over the mita to trace the rise of asogueros as a significant colonial constituency, a new power group whose economic significance caused crown officials to put off mita abolition basically forever.

Craig, Alan K., and Robert C. West, eds. *In Quest of Mineral Wealth: Aboriginal and Colonial Mining and Metallurgy in Spanish America*. Geoscience and Man Series vol.33. Baton Rouge: Louisiana State University Press, 1994.

Crespo Rodas, Alberto. *La guerra entre vicuñas y vascongados: Potosí, 1622-1625*. La Paz: Colección Popular, 1969.

Cunietti-Ferrando, Arnaldo J. *Historia de la Real Casa de Moneda de Potosí durante la dominación hispánica*, *1573-1652*. Buenos Aires: Pellegrini, 1995. Mostly a numismatist's history, and a brief one, with some cedulas and other documents transcribed.

Cruz, Pablo, y J. Vacher, eds. *Minas y metalurgías en los Andes del Sur entre la época pre-hispánica y el siglo XVII*. Sucre: Instituto Francés de Estudios Andinos, 2008.

Cruz, Pablo. 'Huacas olvidadas y cerros santos. Apuntes metodológicos sobre la cartografía sagrada en los Andes del sur de Bolivia. Estudios Atacameños 38 (2009): 55-74.

Cummins, Thomas B.F., and Barbara Anderson, eds. *The Getty Murúa: Essays on the Making of Martín de Murúa's* Historia General del Piru, *J. Paul Getty Museum Ms. Ludwig XIII 16.* Los Angeles: Getty Research Institute, 2008. Contains especially useful essays by Rolena Adorno and Juan Ossio comparing the 1590 Galvin ms. and Guaman Poma's NC y BG.

Dressing, David. "Social Tensions in Early Seventeenth-Century Potosí." Ph.D dissertation. Tulane University, 2007.

Eichmann, Andrés, y Marcela Inch C., eds. La construcción de lo urbano en Potosí y la Plata (siglos XVI-XVII). Sucre: Ministerio de Cultura de España/Archivo y Biblioteca Nacionales de Bolivia, 2008. A kind of foray into cultural history with essays by Ximena Medinaceli, Eugenia Bridikhina, Pablo Luis Quisbert, Marcela Inch (dir. of the national archive), and Maria Luisa Soux. Medinaceli claims Potosi had an Inca court, but there's much more in this almost book-length study. Bridikhina looks at power structures, Quisbert at religious devotion, and Inch at books. Soux looks at crimes of passion and public honor. Some good stuff.

Escobari de Querejazu, Laura. *Caciques, yanaconas y extravagantes: la sociedad colonial en Charcas s.XVI-XVIII*. La Paz: Plural Editores/Embajada de España en Bolivia, 2001. A grab-bag of sorts ranging all over in place and time.

Escobari de Querejazu, Laura. *Producción y comercio en el espacio sur andino en el siglo XVII: Cuzco-Potosí, 1650-1700*. La Paz: Embajada de España en Bolivia, 1985. Escobari's licenciate thesis, U. Mayor San Andres. A bit scattered, but has good info on coca and cloth traders in this stretch. No sign of Gomez de la Rocha, however, as he would have been active in 1630s (he is mentioned on p.63 in relation to mint scandal but

not trade). Note image on p.49 of Cusco painting of San Francisco Solano in Recoleta church by Basilio Santa Cruz w/ Cerro Rico on right. (84-85) notes panyo de Quito but doesn't clearly know its earlier story. cites a few cool Indian worker contracts in Cuzco Franciscan monastery 1649 which allot Quito cloth calzones, suits. Also finds scant mention of coca contracts, but this is probably because it wasn't always recorded. Paucartambo was attacked, she says, by the 'chunchos infieles', so Rocha hadn't stopped them!

Ezquerra Abadía, Ramón. 'Problemas de la mita de Potosí en el siglo XVIII,' in *La minería hispana e iberoamericana*, vol. 1, pp. 483-511. León, Spain, 1970.

Glave, Luis Miguel. *Trajinantes: Caminos indígenas en la sociedad colonial, siglos XVI/XVII*. Lima: Instituto de Apoyo Agrario, 1989.

González Casasnovas, Ignacio. *Las dudas de la corona. La política de repartimientos para la minería de Potosí (1680-1732)*. Madrid: CSIC, 2000. Fills the gap between Cole and Tandeter, and then some. A huge contribution. Mostly on political struggle over mita a la Cole.

Goodrich, Thomas D. The Ottoman Turks and the New World: A Study of Tarih-I Hind-I Garbi and Sixteenth-century Ottoman Americana. Wiesbaden: Otto Harrassowitz, 1990. An amazing look at various copies of an anonymous c.1580 ms. that took Goodrich 25 yrs. to publish. The introduction is quite interesting, and points to a great 'insert' paragraph into Lopez de Gomara's text right after Cortes divides booty and sends letters to Charles describing final victory over the Aztecs in 1521 (253): 'It is requested of His Glorious Majestic Excellency that in the future the bloodthirsty sword of the people of Islam reach that advantageous land and that its regions and districts be filled with the lights of the religious ceremonies of Islam and that the possessions and goods that have been mentioned and the other treasures of the unbelievers marked by disgrace be divided, with the permission of the Lord God, among the masters of the Holy War and the nation full of driving force.' (THE TURKISH CONQUEST OF MEXICO!). Goodrich includes a translation of the one in the Newberry Library, and finds that the sources were Zarate, Peter Martyr, Cieza de Leon, Lopez de Gomara, and Fernandez de Oviedo, all from Italian eds. LAL should definitely try to get a copy of this. Potosi images discussed (61-2) all seem to be from Cieza, and Goodrich figures it's a 1555 Italian ed. that was model, but its mtn is pretty craggy compared to the Newberry and others, which show a more mound-like peak similar to Cieza's original. And the absence of humans in the Italian knock-off doesn't match presence in these. I'd say some artists saw the Spanish version or copies of it. The v brief bit on Potosi is from Zarate, but the translation is not quite direct (285): 'During the course of the campaign the afore-mentioned Carvajal saw on the skirt of a great mountain a prosperous city named Potosi by whose side a river flows. On whatever side they dug, if they fired the earth from one kantar of it, fifteen okkas of pure silver flowed forth. (It seems that the afore-mentioned river was the source of the previously mentioned Silver River [Rio de la Plata].) Then Carvajal collected in the afore-mentioned place seven thousand Indians and laid down this rule: "Everyone is to deliver each week four gold [pieces] worth of silver and he is to keep the rest for

himself." 'Then comes a caption for the image, which was apparently taken from the Italian ed. of Cieza. The Newberry one is image #10, f.93. (286) 'The afore-mentioned group extracted the afore-mentioned mineral in the following way: first they build a great oven and later they mix the earth of the mineral with a quantity of charcoal and dung compost and they place it within the afore-mentioned oven. They drill a hole in its side by wind and make an aperture. Later they fire the charcoal and compost. Then slowly with a fiery glow the silver and gold melts and leaks out by a path. It comes out from one corner of the oven. In this way the afore-mentioned Carvajal amassed 700,000 [pesos of] Peru silver.'

Hanke, Lewis. *The Imperial City of Potosi: An Unwritten Chapter in the History of Spanish America*. The Hague: Martinus Nijhof, 1956. Basically a plan for how to fill in the blanks on Potosi, based on a skimming of published primary sources (two of them edited and published by the author soon after this). Notes few histories available in 1956, scans available ms. material, outlines 'problems': prehistory, silver production and population stats, tech devt, indian labor, mining laws, commerce, 'pretensiones' of the city, lit and learning, social crucible of race, class, etc. Ends with tentative interpretations, which don't amount to much. Mostly a call for context, avoid exaggeration, yet keep clear that this place was big time. Note (p.40) on importance of potato prefigures Crosbystyle approach, or mabye conversations with Carl Sauer. Old refs, but some gems. What's missing? environmental history, women/gender, slavery/slave trade, mint

Hanke, Lewis. The Portuguese in Spanish America, with special reference to the Villa Imperial de Potosi. RHA No. 51 (June 1961): 1-48. Like the above work, this one is mostly speculative and bibliographical, with no reference to archival materials.

Hausberger, Bernd. 'La guerra de los vicunas contra los vascongados en Potosi y la etnicización de los vascos a principios de la edad moderna' in eds. Christian Büschges and Frederique Langue. Excluir para ser. Procesos identitarios y fronteras sociales en la America hispanica (xvii-xviii), pp.23-57. Frankfurt: AHILA/Vervuert, 2005.

Helmer, Marie. *Cantuta: Recueil d'articles, 1949-1987*. Madrid: Casa de Velázquez, 1993. Tons here on Potosi, of course. Great doc. transcription (234-5) of Portuguese bit on contraband c.1586 to BA.

Helmer, Marie. 'Un tipo social: el 'minero' de Potosi.' Revista de Indias 16 (1956): 85-92.

Helmer, Marie. 'Comercio e contrabando entre Bahia e Potosí no século XVI,' *Revista de Historia* (São Paulo, 1953) 15: 195-212.

Herrera y Toledo, Antonio de. Relacion eclesiastica de la Santa Iglesia Metropolitana de los Charcas (1639). ed. Josep Barnadas. Sucre: Archivo-Biblioteca Arquidiocesanos 'Monsenor Taborga,' 1996. A brief, in fact incomplete, account of the church and its district by a Chilean creole schooled in Lima who became racionero then canonigo in Charcas, a contemporary of Ramirez del Aguila. The original ms. is in Trinity College Library, Dublin. Herrera in Spain 1629-36 w/ Madrid Capuchins, likely appted racionero

while there writing his 'life of Christ.' This relacion in response to 1635 cedula, and it compares poorly with Ramirez del Aguila, who was responding to the same request. They clearly knew each other, but as Barnadas notes, Ram knew the district inside and out, whereas Herrera had just arrived. Some details are in H that are not in R, but R is far more valuable. See my pdf scan. (58-60) great description of baths at Tarapaya. Notes (94) at least three cofradias de 'negros' in La Plata.

Jiménez de la Espada, Marcos. Relaciones Geográficas de Indias – Peru. Biblioteca de Autores Españoles 183. Madrid: Atlas, 1965.

Kindleberger, Charles P. Spenders and Hoarders: The World Distribution of Spanish American Silver, 1550-1750. Singapore: Institute of Southeast Asian Studies, 1989.

La minería hispana e iberoamericana. Contribución a su investigación histórica. vol. 1 of Ponencias del VI Congreso Internacional de Minería. León, Spain, 1970.

León Portocarrero, Pedro de. Descripción del virreinato del Perú. ed. Eduardo Huarag Alvarez. Lima: Editorial Universitaria, 2009 [bilingual ed., orig. Portuguese ms. c.1620.

Llanos, García de. *Diccionario y maneras de hablar que se usan en las minas y sus labores en los ingenios y beneficios de los metales (1609)*. La Paz: Banco Central de Bolivia, 1983.

Lohmann Villena, Guillermo. *Las minas de Huancavelica en los siglos XVI y XVII*. Seville: EEHA, 1949. Florid early GLV, with some opaque references and no interest in Indian welfare, but otherwise the only solid study, tracing discovery to reform.

López Beltran, Clara. *Estructura económica de una sociedad colonial: Charcas en el siglo XVII*. La Paz: Centro de Estudios de la Realidad Económica y Social, 1988. A very rigid political economy monograph in the French style, but with glimpses of social concerns in some of the translated appendices.

Mangan, Jane E. *Trading Roles: Gender, Ethnicity, and the Urban Economy in Colonial Potosi*. Durham: Duke University Press, 2005.

Mumford, Jeremy Ravi. *Vertical Empire: The General Resettlement of Indians in the Colonial Andes*. Durham, NC: Duke University Press, 2012.

Marchena Fernández, Juan, comp. *Potosí: plata para Europa*. Seville: Universidad de Sevilla, 2000. A mix of very general and quite focused essays. Best is Tristan Platt on ethnohistory.

Matienzo, Juan. *Gobierno del Perú*. Buenos Aires: Compañía Sud-Americana de Billetes de Banco, 1910. Perhaps best on coca.

Maurtua, Víctor M., ed. *Juicio de límites entre el Perú y Bolivia. Prueba peruana presentada al Gobierno de la República Argentina*. 12 vols. Barcelona: Henrich y Comp., 1906. Vol. 1 includes (281-363) a 1597 Descripcion del Reyno del Peru, del sitio, temple, provincias, obispados y ciudades; de los naturales, de sus lenguas y traje. By Baltasar Ramirez, criado y capellan of Mexico's Viceroy Count of Monterrey don Gaspar de Zuniga y Acevedo. Printed in Mexico? Ramirez says at the end that he was last in Peru in 1580, so some things have no doubt changed. No idea where Maurtua got this doc. He gives no hints. V. good on coca production, less detail on Potosi, but nice mention of borracheras. Scan and translate a few bits (see scan). Vol. 8 is all documents on the Chunchos, 1548-1636. Mix of probanzas, including Diego Centeno's, and missionary accounts. Not much for me, but interesting for eastern Bolivia. (140-46) is 11 Sept 1594 letter from our old friend p. Miguel Cabello de Balboa on conversion of Chunchos. He heads toward Carabaya and finds Chunchos friendly and in need of protection from 'caribe' folks to N, who border on Paititi. a few cool details.

Mendoza, Diego de. Chronica de las Provincias de San Antonio de Los Charcas. [1663] La Paz: Casa de la Cultura 'Franz Tamayo,' 1976. Facsimile of this hagiography of Franciscans and friends. A few bits on Potosi, including this description of the 1626 flood, one of several judgments of God (127-31): 'El ano de mil y seiscientos y veinte y seis, a primero de marzo, revento una de las lagunas que tiene sobre la villa de Potosi, hechas a mano, para la molienda de los metales en los ingenios de su ribera, que como falto de aguas a este beneficio, recoge de las lluvias, y nieves, en lagunas, el agua que ha menester para sus ingenios, y beneficio de metales, todo el ano; fue aquel de muchas aguas, y no tenian las lagunas mas muros, o tajamares a su defensa, y reparo, que unas paredes de cespedes, barro, y piedras, porque la codicia humana, como solo mira a su interes, no cuida de ajenos bienes, y siendo comun a todos, el reparar aquel dano, cada uno atendio a solo el particular del agua, sin atender a la causa, y contentarse solo con el efecto, como si aquel fuese milagroso. La laguna, llamada Caricari, que es de las mas copiosas de agua, recogida de las vertientes de los cerros, que la cercan, llego a estarlo tanto, que el lagunero, temiendo alguna reventazon, dio cuenta al fator Bartolome Astete de Ulloa, que hacia oficio de corregidor de la villa, para que hiziese poner remedio, antes que fuese sin reparo el dano, por el grande que amenazaba tanta cantidad de agua rebalsada, sin resistencia de muros, y combatida de furiosos vientos de aquella region; que se le diese algun desague para asegurarla del peligro que se temia. Codicioso el corregidor y azogueros del agua, que siempre sus ingenios necesitan, no hizieron caso de los requerimientos del lagunero: y asi el Domingo primero de Quaresma, primer dia de marzo, a la una del dia, comenzo a alterarse el agua de la laguna, y oprimida con inquietud, desportillo de un balance el vallado debil, y cerca de cespedes, por un lado, hacia la parte que mira a la villa de Potosi, cosa de tres guartas apique del portillo, por donde salio gran cantidad de agua, que arrastro muchisimas piedras grandes, y cascajo, en un cuarto poco mas de legua que hay de la laguna al pueblo, pero tan cuesta abajo que dio doblada fuerza a la corriente la mucha de caida, para que fuese robando tan gran cantidad de tierra y piedras, que se llevo sin resistencia alguna, todos los ingenios que encontro, que son todos los que caen sobre el pueblo, y de alli los restantes casi de la ribera; haciendo pedazos las ruedas, bolcando los mazos, y exes, derribando las paredes, anegando las casas, y ahogando cuanto hallaba en ellas; tan improvisamente que no tenia

lugar de librar las vidas las personas, ni menos de poner reparo a cosa alguna; con tal furia, y desenfrenada corriente se despenyaba aquel diluvio de raudales, de tierra, piedra y agua, que deshacia cuanto se le ponia al paso, y se llenaba por delante cuanto le salia al encuentro; arrancava de raiz las casas con las personas en las ventanas, y balcones, a voces pidiendo a Dios misericordia, las llevaba en peso, algunos pasos hasta deshazerlos por los cimientos, y derribar paredes y techados, resuelto todo en el agua sin mas demonstración que una breve polvareda, dejando en ella y el agua sepultadas las vidas y despedazados los cuerpos de los que estavan dentro, sin poderles valer recurso humano. (P) El convento de NPS Francisco quedo aislado entre dos brazos de agua, milagrosamente, por ser el que mas peligro corria a la misma ribera de los ingenios: valiole de muro y defensa un grande basurero que por la parte superior tenia al fin de una calle; y no obstante le cogio por un lado el agua, y llevo todo el noviciado, y cavalleriza, que lindaba con el arroyo de los ingenios de la ribera. El brazo de agua que le aislo por la parte del pueblo, robando la calle y el cimenterio mas de una pica a fondo, tan disimuladamente, que algunas personas, que pareciendoles vadeable, se arrojaron a quererle pasar, se ahogaron con las cavalgaduras, sumergiendose tan profundamente que apenas entraban en el agua cuando se perdian de vista. Muchos por socorrer a otros que a sus ojos veian ahogarse, se ahogaban con ellos; porque las piedras que arrastraba el corriente, mazos, exes, y ruedas, despedazados de los ingenios desechos, no solo no les daba lugar a nadar, y valerse de las propias fuerzas e industria, mas les quebraba los brazos, rompia las piernas, y despedacaba las cabezas, y a muchos destrozaba los cuerpos; los mas que perecieron fueron Indios, unos atados de su natural torpeza, que pudiendo asegurarse, daban lugar a los raudales, que los arrebatase en medio de su pasmo, y embeleso; otros llevados de su codicia se arrojaban a la corriente, por hacer presa, y haver a las manos muchas ricas preseas, que llevaba el agua, se les iban los pies, y se ahogaban enganados del deseo. Consumiose el Santisimo Sacramento en nuestra iglesia, esperando los religiosos por instantes sobre si, y sobre todo el convento, la mayor fuerza de la inundacion, como quien estaba en medio de sus corrientes, y debajo de sus hondas, por estar tan superior la laguna. Eran tan grandes los golpes de las piedras, unas con otras, que los cimientos de la iglesia, paredes, y campanario, cimbraba, como pudiera con un gran terremoto. (P) Acordaron los religiosos (viendo el conocido peligro en que se hallaban) valerse del favor, y patrocinio de la Santa, y milagrosa imagen del Crucifixo de la Santa Vera Cruz, y sacandole en procesion al cimenterio, por donde venia caudalosamente el agua, fue tan buen premiada su fe, que luego al punto cesaron las corrientes, con admiración de todos los circunstantes, que atribuyeron a milagrosa tan improvisa calma, en tan desecha tormenta. No menos fue digno de memoria, a gloria y honra de Dios, y devocion del Santo Crucifijo, que estando en aquella ocasion Juan Mirador, sindico del convento, y mayordomo de la Santa Vera Cruz, enfermo en su casa, en la cama, poco antes que llegase el agua de la laguna a su casa, se le aparecio el Santo Crucifixo, diciendole, que a toda priesa saliese fuera, y salvase la vida; y luego que salio (como mejor pudo) llego el agua, y le llevo la casa, y cuanto que en ella habia, sin dejar mas de la ropa que saco encima; como el mismo Juan Mirador lo declaro despues, haciendose llevar a la Capilla del Santo Crucifijo, a darle gracias por tan singular favor; que asi quizo premiarle en esta vida, lo mucho que le habia servido mayordomo de aquella cofradia; y despues los religiosos le dieron vivienda en el convento (como a su sindico) donde murio de su enfermedad. (P) Perdieronse en aquella villa con la

inundacion muchos millones de hacienda, así en metales que estaban en los ingenios para moler y beneficiar, y molidos, y puestos en beneficio en los buitrones, como azogues, barras, pinas de plata, moneda, alhajas de casa, joyas, y plata labrada, que enterro el agua, desperdicio, y llevo casi con los mismos ingenios, corrientes y molientes. Murieron mas de dos mil personas ahogadas y hechas pedazos con las muchas piedras, tierra, y maderos de los ingenios, que llevaba con grandisima violencia el agua, hasta hacer madre capaz, por donde salier encanyada a la quebrada, o valle de Tarapaya abajo, sin perdonar cosa alguna de cuantas encontraba por el camino que es el real, y de mayor concurso de toda la sierra, de los que entran y salen al trato y comercio de aquella villa. Duro la inundacion desde la una del dia hasta mas de las tres de la tarde, con tan gran estruendo y confusion de la villa, que parecio (a nuestro decir) dia de juicio, pues en un punto se vieron casas muy poderosas, con solas memorias de lo que fueron, y personas muy ricas desnudas, sin tener mas que el vestido que sacaron consigo, ni que llegar a la boca: en suma fue un breve teatro, donde al vivo se represento con todas veras las burlas del mundo, los lances de lo que el vulgo llama fortuna; y se reconocio (con bien costosa experiencia) la corta duración de los bienes humanos, sujetos (cuando mas seguros) a varios accidentes del tiempo, donde son mas ciertos que las seguridades, los peligros. (P) Otro dia despues que hubo sosegado el agua, se dispuso (por los animos piadosos de los fieles) dar sepultura a tantos cuerpos muertos, como parecieron en termino de dos leguas, arrojados por las riberas, y sulcos que dejo el agua, unos sin cabezas, otros sin brazos, y sin piernas muchos, medio enterrados en las lamas, y detenidos algunos en las estrechezes de las penas: mas el catolico y piadoso celo de aquella Imperial Villa, fundo (con aquella ocasion) una ilustre cofradia de la Misericordia en la iglesia mayor, entre los vecinos, asi sacerdotes como seculares, eligiendo, y votando por su patrona a la virgen santisima de la Piedad, y luego los cofrades, mayordomos, y veinticuatros, con sus pendones e insignias de barreta y azadon, vestidos de escapularios verdes, siguiendo un estandarte blanco con cruz verde en medio, fueron en procesion por los caminos, que dejo el agua, con una campanilla delante, recogiendo todos los cuerpos muertos; y eran en tanto numero, que una recua de mulas se ocupaba aquellos dias en traerlos y no era suficiente, demas de los amigos que iban por sus amigos muertos, los padres por los hijos, hermanos, y deudos, por cada cual que le pertenecia, ya en sangre, ya en obligacion, y ya en amistad, conforme le habia cabido la suerte en aquella feria de desdichas. Todo era confusion, voces, lagrimas, suspiros, y lamentos, mas crecidos a vistas de la desgracia, con los cadaveres en los brazos, hiriendo los oidos lastimosos dobles de campanas en toda la villa, alaridos de los indios y demas personas vulgares, encontrando a cada paso los cuerpos destrozados y tan disformes que con dificultad podian conocerse por las senas: mas como eran tantos, hacianse hoyadas grandes en los cimenterios de las iglesias, donde se enterraban de diez en diez, de veinte en veinte los cuerpos; y media legua de Potosi en la parroquia de Cantomarca, que era la mas vecina, se hizo hoyo tan grande que se enterraron en el mas de cien cuerpos juntos, de espanoles y de indios. Toda esta diligencia fue forzosa, porque la corrupcion no apestase lo restante de la villa. (P) Mucho tuvo de misterioso este estrago, y rigurosa mano de Dios; por aver antes precedido las sangrientes guerras civiles que llamaron de los Vicunas, por los somberos de vicuna que usaban los sediciosos; con tan gran escandalo, y muertes de todas naciones encontradas con la Vizcaina, especialmente la Extremena; ocasionadas disenciones de malos juicios, y peores voluntades de una y otra parte. El Presidente don Diego de Portugal trato luego del

reparo conveniente a tan considerable dano, como el de aquellas lagunas, tan forzosas a las moliendas de los metales, y beneficio de plata; y mas por asegurar el pueblo, que cada dia salia sobresaltado de sus casas, con falso asaltos de nuevas reventazones de agua, que divulgaban los que pretendian vueltas del alboroto hacer lance en las haciendas. Luego se muraron las lagunas de cal y canto, con profundos cimientos de dos varas de grueso los muros, con sus compuertas fuertes, y seguras; con que se quieto el continuo recelo de aquella villa; haciendo especial desague a las lagunas por donde poderlas sangrar, cuando parece convenir por la mucha abundancia de aguas recogidas.' Also interesting (132-3) is 1647 (no day/mo. given) icefall from Illimani: 'El ano de mil y seiscientos y quarenta y siete se desgajo del cerro grande de la cordillera, catorce leguas de Chuquiabo, llamado Hilimani, tan gran pedazo de nieve, desde la cumbre del cerro hacia el oriente (toda empedernida por los muchos siglos que habia estaba congelada, y de los vapores de la misma tierra, estaba denegrida en partes, y en partes azul) dio casi media legua de salto por haver encontrado al caer en una pena viva; y dio en unas caserias de Indios, que estaban en sus embriaguezes, mato mas de veinte personas, enterrandolos en sus mismas casas, sin poder tener recurso, por ser el derrumbo a medianoche, y aunque dieron voces, ni pudieron ser oidos de los Indios vecinos, ni socorridos de persona humana; solos dos muchachos Indiezuelos libraron las vidas, puestos de pies sobre los hombros de su padre, de donde puderion levantar el grito, y a la manyana ser socorridos de la gente de las chacras vecinas y desenterrar a los demas de la nieve.' Next is 1650 Cuzco quake.(139) among 'prodigiosas senyales': El ano de mil y seiscientos y quarenta y nueve hubo tan gran tempestad de rayos en la ciudad de Chuquisaca, dia que celebraba nuestro convento [San Francisco] la fiesta de la Inmaculada Concepcion de Nuestra Senora, que mato algunas personas, y un rayo que cayo en nuestro convento hizo grande estrago, dio a un religioso novicio, llamado Fray Joseph del Castillo, y sin hacerle dano alguno, le dejo impresa en las espaldas una prodigiosa senal de una estrella con el rayo inferior, dilatado y culebreado, asi persevero por muchos dias en la carne esta senal, sin lesion alguna al sugeto, y por cosa prodigiosa la vio toda la ciudad, dando gracias a Dios por el milagroso suceso, y a la Virgen Santisima, cuya festividad celebran desde entonces con mayor devocion, de publicas demostraciones que la ciudad y clero hace todos los anos.' Also mentions solar event 9:30 a.m. 28 Nov. 1652 visible from La Plata, Potosi, and Cochabamba. Sun surrounded by bright rainbow colored ring, moon and morning star also in the ring. wild. (377-474) celebrates nuns of Santa Clara, Cuzco, gives idea of life Rocha's sister was supposed to live (short and painful). Brief mention of a nun called Juana Gomez on p.474, who lived long and cared for sick. (526) life of Padre Lic. Hernando Dias, cura of San Benito, Potosi (did I see his will at ABNB? I think so, he dies 12 March 1650) He tests in Chuquisaca for Quechua and Aymara before getting parish in Potosi. If he's same guy, it would be funny to contrast his huge wealth with the 'poverty' Mendoza claims (535). Careful not to let women in his house! (537). He dies at age 70, 40 yrs in post. Some other Potosi priests, then (562-74) is life of Maria de Jesus, Abadesa of Recogidas of 3rd order of penitencia of San Fran in Potosi, dies 1653. Worth quote perhaps. She's orphan. Basically her story is St. Rose-like, or like Mariana de Quito. Actually few details relevant to Potosi life. She tries to get convent founded, unclear if it really gets going, but money raised. See scan of pp.

Mills, Kenneth, 'Diego de Ocaña's Hagiography of New and Renewed Devotion in Colonial Peru. In Allan Greer and Jodi Bilinkoff, eds. *Colonial Saints: Discovering the Holy in the Americas*, *1500-1800*. New York: Routledge, 2003, pp. 51-75.

Mumford, Jeremy Ravi. *Vertical Empire: The General Resettlement of Indians in the Colonial Andes*. Durham: Duke University Press, 2012. Not about Potosi, but good update on Toledan resettlement.

Numhauser, Paulina. *Mujeres indias y señores de la coca: Potosí y Cusco en el siglo XVI*. Madrid: Cátedra, 2005.

Ocaña, Fray Diego de. *Viaje por el Nuevo Mundo: de Guadalupe a Potosí, 1599-1605*. eds. Blanca Lopez de Mariscal y Abraham Madroñal. Madrid/Frankfurt: Iberoamericana/Vervuert, 2010.

Querejazu Calvo, Roberto. Chuquisaca, 1539-1825. Sucre: Imprenta Universitaria, 1987. A narrative derived from the author's extensive study in libraries and archives, but references are not to page numbers or legajos, just 'AGI,' etc. Of little use to scholars.

Rice, Prudence M. *Vintage Moquegua: History, Wine, and Archaeology on a Colonial Periphery.* Austin: University of Texas Press, 2012.

Rudolph, William E. 'The Lakes of Potosi' *Geographical Review* XXVI (1936): 529-54.

Saignes, Thierry. "Capoche, Potosi y la coca. el consumo popular de estimulantes en el siglo XVII." Revista de Indias 48:182-83 (1988): 207-35.

-----. "Notes on the Regional Contribution to the Mita in Potosi in the Early Seventeenth Century." Bulletin of Latin American Research 4:1 (1985): 65-76.

Salazar-Soler, Carmen. "Los 'expertos' de la Corona. Poder colonial y saber local en el Alto Perú en los siglos XVI y XVII." *De Re Metallica* 13, no.2 (July-Dec. 2009): 83-94. A history of science prosopography from Benino to Barba, with Capoche and Garcia de Llanos in between. Nice in balancing New World/Old World knowledge flow and creation. Idea Salazar hits ad nauseum is idea of 'expert.' Not that helpful. But see Serge Gruzinski's 2004 book on 'the first globalization.' And find F. Godoy's 1607 relacion de Oruro, presumably in BL. Garcia de Llanos ms. on Potosi in archivo del duque del Infantado, Madrid (never published?). See also Salazar-Soler's work on alchemical ideas of Barba.

Sawday, Jonathan. *Engines of the Imagination: Renaissance Culture and the Rise of the Machine*. New York: Routledge, 2007. In part an art historical meditation on mechanization as tension b/w progress against nature vs. reminder of the fall from grace. Key point is ambivalence over machines as labor saving yet unnatural. Potosi was thus not only high and dry and cold and notable for its swiss-cheese mountain, it was noisy, smoky, and dusty thanks to all the mills. Cool in chap. 2 is Leonardo's ambivalence about

water, great for power but great destroyer - as happened in Potosi. Think of the whole mountain as tower of Babel that comes crashing down. Also useful is notion of machines and social power - Cole's rise of the asogueros as a new social class, like Brazil's 'lords of the mill' or Zaruma's 'duenos de ingenios.' (58) and could Potosi be one of Mumford's megamachines? it would seem to fit, with 'technology as spectacle and ceremony' (64) a la the 1586 raising of the papal obelisk in Rome. Next is how bodies are linked to machines

Smith, Pamela H. The Business of Alchemy: Science and Culture in the Holy Roman Empire. Princeton: Princeton University Press, 1994. A German story, about Joachim Becher, but from the era of Alvaro Alonso Barba, so great for context. And Becher was a 'practical' alchemist who learned from the lab, so much like Barba. A neo-Stoic in the Lipsius mold.

Tandeter, Enrique. *Coercion and Market: Silver Mining in Colonial Potosi, 1692-1826.* trans. Richard Warren. Albuquerque: University of New Mexico Press, 1993 [1st Span. ed. 1992]

TePaske, John J. *A New World of Gold and Silver*. Ed. Kendall W. Brown. Leiden & Boston: Brill, 2010.

U.S. Geological Survey and Servicio Geologico de Bolivia. *U.S. Geological Survey Bulletin 1975. Geology and Mineral Resources of the Altiplano and Cordillera Occidental, Bolivia*. U.S. Government Printing Office, 1992. Great stuff on Lipez, Chocaya, Berenguela, basically everything west of Oruro.

Van Buren, Mary, and B. Mills, 'Huayrachinas and tocochimbos: Traditional smelting technology of the Southern Andes' *Latin American Antiquity* 16:1 (2005): 2-25.

Vazquez de Espinosa, Antonio. *Compendium and Description of the West Indies*. trans. C.U. Clark. Washington, D.C.: 1942.

Von Glahn, Richard. Fountain of Fortune: Money and Monetary Policy in China, 1000-1700. Berkeley: University of California Press, 1996. Chap. 4 is 'Foreign Silver and China's 'Silver Century,' 1550-1650.' So the cycle at least matches our story more or less, as this is the rise and fall of Potosi. nice quote on 127 by 'Fujian native He Qiaoyuan' in 1630 vs. 1626 foreign trade ban: 'By the 'Eastern Ocean we mean Luzon, which is populated by the Portuguese [sic]. Their country contains silver mountains, the product of which the foreigners mint into silver coins in prodigious quantities. When our Chinese subjects journey to trade in the 'Western Ocean' [i.e. continental SE Asia and the Indian Ocean] they trade the goods we produce for the goods of others. But when engaging in trade in Luzon they have designs solely on silver coins...A hundred jin of Huzhou silk yarn worth 100 taels can be sold at a price of 200 to 300 taels there. Moreover, porcelain from Jiangxi [i.e., the pottery works of Jingdezhen], as well as sugar and fruit from my native Fujian, all are avidly desired by the foreigners.'

Wiedner, David. 'Forced Labor in Colonial Peru,' The Americas 16 (1960): 357-83.

Wolff, Inge. 'Negersklaverei un Negerhandel in Hochperu, 1545-1640.' *Jarbuch für Gesheichte von Staat, Wirtschaft un Gesellschaft Lateinamerikas* 1 (1964): 157-86.

Zavala, Silvio. *El servicio personal de los indios en el Peru*. 3 vols. Mexico City: 1978-1980.