Antonio Vazquez de Espinosa, Compendium and Description of the West Indies, c. 1620

Antonio Vazquez de Espinosa (d. 1630) was a Spanish Carmelite friar who abandoned his academic ambitions in order to serve as a priest in the Americas. After his retirement, Espinosa wrote several books about his work in Spanish America. This excerpt from his best known work records his observations on mining operations at the Huancavelica mercury mine and Potosí silver mine in Peru and the Spanish system of Indian forced labor referred to as the mita.

Source: Antonio Vazquez de Espinosa, Description of the Indies, c 1620, trans. by Charles Upson Clark, Smithsonian Institution Press, 1968.

## Huancavelica

... It contains 400 Spanish residents, as well as many temporary shops of dealers in merchandise and groceries, heads of trading houses, and transients, for the town has a lively commerce. It has a parish church ... a Dominican convent, and a Royal Hospital under the Brethren of San Juan de Diós for the care of the sick, especially Indians on the range; it has a chaplain with a salary of 800 pesos contributed by His Majesty; he is curate of the parish of San Sebastian de Indios, for the Indians who have come to work in the mines and who have settled down there. . . .

Every two months His Majesty sends by the regular courier from Lima 60,000 pesos to pay for the mita of the Indians, for the crews are changed every two months, so that merely for the Indian mita payment . . . 360,000 pesos are sent from Lima every year, not to speak of much besides, which all crosses . . . that cold and desolate mountain country which . . . has nothing on it but llama ranches.

Up on the range there are 3,000 or 4,000 Indians working in the mine; it is colder up there than in the town, since it is higher. The mine where the mercury is located is a large layer which they keep following downward. When I was in that town [in 1616] I went up on the range and down into the mine, which at that time was considerably more than 130 srades deep. The ore was very rich black flint, and the excavation so extensive that it held more than 3,000 Indians working away hard with picks and hammers, breaking up that flint ore; and when they have filled their little sacks, the poor fellows, loaded down with ore, climb up those ladders or rigging, some like masts and others like cables, and so trying and distressing that a man empty-handed can hardly get up them. . . . Nor is that the greatest evil and difficulty; that is due to thievish and undisciplined superintendents. As that great vein of ore keeps going down deeper and they follow its rich trail, in order to make sure that no section of that ore shall drop on top of them, they keep leaving supports or pillars of the ore itself, even if of the richest quality, and they necessarily help to sustain and insure each section with less risk. This being so, there are men so heartless that for the sake of stealing a little rich ore, they go down out of hours and deprive the innocent Indians of this protection by hollowing into these pillars to steal the rich ore in them, and then a great section is apt to fall in and kill all the Indians, and sometimes the unscrupulous and grasping superintendents themselves . . . and much of this is kept quiet so that it shall not come to the notice of the manager and cause the punishment of the accomplices. . . .

... On the other side of the town there are structures where they grind up the mercury ore and then put it in jars with . . . many little holes . . . and a channel for it to drip into and pass into the jar or place where it is to fall. Then they roast the ore with a straw fire. . . . Under the onset of this fire it melts and the mercury goes up in vapor or exhalation until, passing through the holes in the first mold, it hits the body of the second and there it coagulates rests and comes to stop

where they have provided lodging for it; but if it does not strike any solid body while it is hot, it rises as vapor until it cools and coagulates and starts falling downward again. Those who carry out the reduction of this ore have to be very careful and test cautiously; they must wait till the jars are cold before uncovering them for otherwise they may easily get mercury poisoning and if they do, they are of no further use; their teeth fall out, and some die.

## Potosí

According to His Majesty's warrant, the mine owners on this massive range have a right to the mita of 13,300 Indians in the working and exploitation of the mines. . . . It is the duty of the Corregidor of Potosí to have them rounded up and to see that they come in from all the provinces between Cuzco over the whole of El Collao and as far as the frontiers of Tarija and Tomina; this Potosí Corregidor has power and authority over all the Corregidors in those provinces mentioned; for if they do not fill the Indian mita allotment assigned each of them in accordance with the capacity of their provinces as indicated to them, he can send them, and does, salaried inspectors to report upon it, and when the remissness is great or remarkable, he can suspend them, notifying the Viceroy of the fact.

These Indians are sent out every year under a captain whom they choose in each village or tribe, for him to take them and oversee them for the year each has to serve; every year they have a new election, for as some go out, others come in. This works out very badly, with great losses and gaps in the quotas of Indians, the villages being depopulated; and this gives rise to great extortions and abuses on the part of the inspectors toward the poor Indians, ruining them

and thus depriving the . . . chief Indians of their property and carrying them off in chains because they do not fill out the mita assignment, which they cannot do, for the reason given and for others which I do not bring forward.

These 13,300 are divided up every 4 months into 3 mitas, each consisting of 4,433 Indians, to work in the mines on the range and in the 120 smelters in the Potosí and Tarapaya areas; it is a good league [about three miles] between the two. These mita Indians earn each day, or there is paid each one for his labor, 4 reals. Besides these there are others not under obligation, who . . . hire themselves out voluntarily: these each get from 12 to 16 reals, and some up to 24, according to their reputation of wielding the pick and knowing how to get the ore out.

These . . . will be over 4,000 in number. They and the mita Indians go up every Monday morning to the locality of Guayna Potosí which is at the foot of the range; the Corregidor arrives with all the provincial captains or chiefs who have charge of the Indians assigned them, and he there checks off and reports to each mine and smelter owner the number of Indians assigned him for his mine or smelter; that keeps him busy till 1 p.m., by which time the Indians are already turned over to these mine and smelter owners.

After each has eaten his ration, they climb up the hill, each to his mine, and go in, staying there from that hour until Saturday evening without coming out of the mine; their wives bring them food, but they stay constantly underground, excavating and carrying out the ore from which they get the silver. They all have tallow candles, lighted day and night; that is the light they work with, for as they are underground, they have need of it all the time. The mere cost of these candles used in the mines on this range will amount every year to more than 300,000 pesos, even though tallow is cheap in that country, being abundant; but this is a very great expense, and it is

almost incredible, how much is spent for candles in the operation of breaking down and getting out the ore.

These Indians have different functions in the handling of the silver ore; some break it up with bar or pick, and dig down in, following the vein in the mine; others bring it up; others up above keep separating the good and the poor in piles; others are occupied in taking it down from the range to the mills on herds of llamas; every day they bring up more than 8,000 of these native beasts of burden for this task. These teamsters who carry the metal do not belong to the mita, but are mingados—hired.

So huge is the wealth which has been taken out of this range since the year 1545, when it was discovered, up to the present year of 1628, which makes 83 years that they have been working and reducing its ores, that merely from the registered mines, as appears from an examination of most of the accounts in the royal records, 326,000,000 assay<sup>8</sup> pesos have been taken out. At the beginning when the ore was richer and easier to get out, for then there were no mita Indians and no mercury process, in the 40 years between 1545 and 1585, they took out 111,000,000 of assay silver. From the year 1585 up to 1628, 43 years, although the mines are harder to work, for they are deeper down, with the assistance of 13,300 Indians whom His Majesty has granted to the mine owners on that range, and of other hired Indians, who come there freely and voluntarily to work at day's wages, and with the great advantage of the mercury process, in which none of the ore or the silver is wasted, and with the better knowledge of the technique which the miners now have, they have taken out 215,000,000 assay pesos. That, plus the 111 extracted in the 40 years previous to 1585, makes 326,000,000 assay pesos, not counting the great amount of silver secretly taken from these mines . . . and to other countries outside Spain; and to the Philippines and China, which is beyond all reckoning. . . .

Over and above that, such great treasure and riches have come from the Indies in gold and silver from all the other mines in New Spain and Peru, Honduras, the New Kingdom of Granada, Chile, New Galicia, New Vizcaya, and other quarters since the discovery of the Indies, that they exceed 1,800 millions.