

hands of the proprietors. In some instances, where dollars were scarce, checks upon the shops were given for the amount due to each labourer, and thus a sort of paper circulation created, which was seldom objected to where the credit of the adventurers was tolerably well established.

At Catorce, the Governor of San Luis has two shops, from which he derives a very considerable addition to his income; but his principal profits consist in the trade in "bars" of silver, which, as it is now organized, affords to any capitalist a very profitable investment, unaccompanied by any risk.

The silver is bought up from the poorer miners and rescataores, who are anxious to convert it into ready money as speedily as possible, at seven dollars and six reals the marc. At San Luis the mint price is eight dollars and two reals. The "Bar" contains 136 marcs, which, at four reals profit upon each, leave 540 reals, or sixty-seven dollars and a half, to the purchaser, out of which must be deducted two dollars for the carriage of the "bar" to San Luis, and two dollars more for commission and agency there and at Catorce. The net profit is therefore sixty-three dollars and a half on each bar, and in an establishment where thirty and forty bars are negotiated monthly, the amount at the end of the year is very considerable.

I have given these details upon a subject, which to many of my readers may appear unimportant, in order to exemplify the possibility of silver being

sold in the more remote districts, at four and four and a half dollars the marc during the Revolution, although the mint price was never less than eight dollars, and two or four reals. It will be seen that there is nothing improbable in the fact, since in time of peace, and within fifty leagues of the capital of a mining state, the sacrifice of four reals upon the marc is still made, in order to obtain immediate supplies in dollars. As the produce of the country increases, these supplies will become more abundant, and the profits of the capitalist diminish in proportion; but much time will probably elapse before the present rate of discount\* can materially decrease.

Of the great Haciendas, or amalgamation works of Catorce I can say nothing, as I was prevented from visiting them by the distance, and the extreme badness of the roads. I was informed, however, that those belonging to the Catorce Company, the Governor, and the principal rescataores, at El Cédral, Vānēgās, and Mātēhūālā, are all upon the model of those of Guanajuato, and, in general, extremely well conducted. The spots selected for most of them abound, (comparatively at least,) in wood, water, and forage, the extreme dearness of which in the Real itself sufficiently accounts for the

\* I hardly know whether the term of "discount" can be properly applied to the operation which I have just described. European bankers, however, would probably be glad to be able to effect their discounts upon so substantial a substitute for paper.

state of wretchedness to which all similar establishments there are reduced. An arroba of common Zacate, (dry grass,) costs at Catorce from one and a half to three reals. Maize rises during moments of scarcity to eight and ten dollars the fanega. The ordinary price is from two to three dollars, and even at this the expence of maintaining the number of mules required for a large establishment of tahonas, or arrastres, where water-power cannot be applied, would be enormous. It is on this account that every possible mode of shortening the process of amalgamation has been resorted to by the rescata-dores of Catorce, who have introduced a mode of treating the poorer ores, called El beneficio de Cazo, which is but little known in other districts. The ores are prepared for this process by washing, upon an inclined plane, (La Planilla,) which is in fact a bad substitute for the concentrating machine, mentioned in the preceding book. When separated, as much as possible, from the earthy particles, they are placed in a large cauldron, with a copper bottom, called El Cazo, below which a fire is kept up. The metalliferous earth is then diluted with water, until it becomes quite of a thin consistency, when salt is added, (p<sup>a</sup>. limpiar, castrar,) and quicksilver in the usual proportion; this is not, however, thrown in until the fluid has been in a boiling state for at least two hours. The whole is kept in motion by a man provided with a rake, (rastrillo,) and in six hours the incorporation of the quicksilver with a portion

of the silver is generally found to have taken place. The water is then drawn off, and the residue (called polvillos) submitted to the ordinary process in the Patio, not more than one-half of the silver being extracted in the Cazo. The same process is sometimes carried on upon a larger scale, the Cazo being made to resemble an arrastre in shape, with a fire beneath, while the contents are kept in constant motion by two large blocks of wood, attached (like the blocks of granite in the arrastre) to a revolving cross beam, worked by a mule. This system is termed "Beneficio del fondon," a caballo, and is infinitely more productive than that of the simple Cazo; as, from the weight of the blocks, there is no deposit, and the action of the mercury upon the ores is much promoted. If the boiling be continued sixteen hours in lieu of eight, there seldom remains anything for the patio; but as the process is attended with more expence, it is seldom resorted to.

We remained at Catorce five whole days, being constantly induced to defer our departure by the number of objects that unexpectedly claimed our attention. During this interval I visited all the mines described in the preceding pages, nor can I sufficiently express my obligations to their proprietors for the readiness with which they answered my innumerable inquiries, and supplied me with every information that it was in their power to convey. They all seemed most anxious that the resources of their district should be made known to Europe, for

they consider its future prosperity as intimately connected with that of the Company, by which they hope to see the Veta Madre restored to its pristine splendour, and they imagine, not without some reason, that the recent discouragement of European Capitalists has proceeded more from a doubt as to the producing powers of the country, than from any other cause.

I have seldom witnessed more hospitality, or a more friendly feeling towards foreigners, than was evinced at Catorce. Nor was this a display elicited by my visit, for I was assured by the agents of both the companies that they had uniformly met with the most kind and liberal treatment, and that the good understanding which prevailed in 1826, had not upon any occasion been interrupted. With regard to ourselves, nothing could exceed the politeness with which we were treated. On the 3rd of December, the day before our departure, we dined with a very large party at the Obregones, whose table might certainly have induced a belief that the Concepcion was in Bonanza, for a more magnificent display of dishes I have seldom seen, and many of them were brought from a distance of fifty and sixty leagues. In the evening we went to a ball, at which all the belles of the place were assembled. We found the same scarcity of gloves and corsets amongst the ladies, as at Guänäjūatō, but segars were countless; and though the old Mexican mackaw dress of 1823, (scarlet and yellow,

with pink or green shoes,) prevailed in all its purity, the brilliancy of the colours was rendered less intolerable by the clouds of white smoke in which the wearers were enveloped. The utmost good-humour however prevailed, as soon as the apprehensions of "etiqueta rigurosa," which the presence of so formidable a person as Mrs. Ward at first occasioned, had a little subsided: a Padre Dominicano had the goodness to play us some national airs upon a harpsichord, which had penetrated into these elevated regions; and a valse figurée was danced with the guitar, (played alternately by the lady and gentleman while dancing,) which, if not particularly decent, was at least singular, and executed with great precision.

On the following morning we took leave of our numerous friends, to many of whom I was indebted for some very valuable additions to my mineralogical collection, and descended, accompanied by a number of the most respectable inhabitants of the town to the Cañada, where our coach was already loaded, and only awaiting our arrival, in order to commence its route towards Sōmbrērētē, which was the next place of importance on our road towards the North.

The descent from Catorce is much more formidable than the approach to the town from below. Yet so familiarised had we become with rocks and precipices, that Mrs. Ward did not think of dismounting, but rode down to the Cañada without apprehension.

She had indeed served a pretty good apprenticeship during her residence in the place, for the road to the two Socabones of La Purisima and La Luz, to both of which she accompanied me, is infinitely worse than that to the Cañada; and even the ascent to the Veta Madre, which she visited two or three times, in order to get a good drawing of the town from the Tiro del Compromiso, is not without danger.\*

\* This drawing will be engraved separately, together with views of Sömrerëtë, Zacatecas, Tlalpujahuá, Valladolid, and Guanajuato, should my present undertaking have the effect of awakening public curiosity with regard to Mexico sufficiently to encourage me to proceed.



### SECTION III.

#### JOURNEY FROM CATORCE TO SOMBRERETE.

##### MINES OF THAT DISTRICT.

ON quitting the Cañada of Catorce (Dec. 4), we began to pass what we all termed the Desert, or, in other words, a plain, extending, without any other variety than the occasional undulations of the surface, from the mountains of Cătörçë to those of Zăcătēcăs, a distance of about seventy leagues. The whole of this space is covered with a sort of mimosa, with very long thorns; another smaller shrub, the name of which I do not know, but which resembles the box in the shape and colour of its leaf; mezquites, and dwarf palms, bearing a fruit not unlike the real date in appearance, and by no means unpalatable. Water there is none, except in vast "tanques," or reservoirs, kept up at a considerable expence, as it is upon them that the proprietors rely for the preservation of the enormous flocks of sheep and goats which are bred upon their estates.