

We got to the head of the valley, and entered on the romantic woodlands. On each side of the road, we had a great variety of well-grown trees (some very large), shrubs, underwood, and wild flowers. A conical hill was covered entirely with pine, fir, and spruce of every kind, which had a good effect among the other diversified woods. Winding through these, with an occasional peep of the more open scenery, we emerged from them to look down on Guajaloté, the loveliest of plains, or rather the finest of parks, adorned with trees clumped on a fine sward. This was "the farm," where the cattle, horses, and sheep were pastured. After gazing for a while at the scene which thus lay at our feet, we returned to Real del Monte, admiring once more the beauties which nature, with so lavish a hand, had scattered among the surrounding boundaries of the mining district.

Our dinner-party was increased by Mr. Brenchley, a gentleman who had been long in the employment of the old Real del Monte Company, and now about to proceed to England. The social enjoyments of the evening formed a pleasant sequel to the out-door amusements of the day.

LETTER XXXVII.

MINING STATISTICS.

Real del Monte, August, 1851.

It is not at all my intention (seeing it is not within the scope of my actual capabilities), to enter into any historical account of the mines of this country, nor yet to give purely scientific details of the various processes of mining at large, as practised in Mexico; but as the mineral riches of the country constitute its most important feature, I cannot entirely pass over the subject without notice. In what I have to say, I shall borrow from Mr. Ward, to some extent; for his elaborate and interesting account of "the mines of Mexico," is the best, if not the only one I have read; while his book is not now generally accessible to the reading community. I shall keep principally to leading statistics, except in the case of Real del Monte.

Mr. Ward gives a table, by which it appears that the registered coinage of the Mint of Mexico,

from the year 1796 to the year 1810 (inclusive), amounted to 342,114,285 dollars, or an average of 22,807,619 dollars yearly. He adds, for silver (registered, and unregistered) *not* coined, 1,192,381 dollars; thus giving twenty-four millions of dollars as the whole annual average produce of the mines of Mexico, during the fifteen years which immediately preceded the revolution of 1810.

The total average of exports of silver, during the same time on merchants' account, may be taken at about 13,000,000 dollars; and on king's account, about . 9,000,000 „

together 22,000,000, leaving an accumulation in Mexico, of silver, in these 15 years, of about thirty millions, less the amount consumed for domestic and other purposes.

It may be sufficient here to observe, in regard to the produce of the mines and coinage, from 1810 to 1849, that the mining interest suffered severely during the course of the revolution; but that in later years, the coinage has gradually increased, till in 1848, it reached to little less than 20,000,000 of dollars, a near approach to the most flourishing times of the Spanish rule.

During certain epochs between 1810 and 1850, the falling off in some of the mines of silver, was very striking. In the district of San Luis de Potosi, for instance, the decrease of produce during the first five years (after 1810), amounted to nearly ten millions of dollars. "The produce of the Biscayna vein, at Real del Monte, in seven good years before the revolution (from 1794 to 1801), was six millions of dollars, or 857,042 dollars per annum; from 1809 to 1823, it only yielded 200,000 dollars, in all, or 14,285 dollars per annum!"

In Mexico, when rich veins of ore are fallen upon in the mines, they are called "Bonanza," "fine weather" nautically—"prosperity" metaphorically;* and marvellously fine, indeed, has that weather sometimes been. The Marquis of Bustamante acquired millions of dollars by his great *bonanza* at Batopilas; we have seen how the

* Mr Ward says, "it always signifies that things (in the mine) are going on satisfactorily; in short, that you are in the trades, with studding-sails set, and every prospect of a prosperous voyage." In Peru, the flourishing mine is said to be in *Boya*, a buoy; whence buoyant, or following out a nautical similitude, like Mr. Ward, "*en boya*," "you are in a clipper, making a quick passage."

Conde de Regla succeeded with a *bonanza* at Real del Monte; and at a mine belonging to the Fagoaga family, called *Sombrerété*, when giving about half a million of dollars annually, they fell on a celebrated *bonanza*, which disgorged eleven millions of dollars in eight months.

There are mints established in the Republic for the coinage of their precious metals, at Mexico, Guadalajara, Zacatecas, Durango, and Guanajuato. In 1826, the whole coinage in these five mints did not exceed 7,463,300 dollars.

At the present time, the following extract from Mr. Ward's book (vol. ii, p. 49) is curious and interesting, as shewing that seventy-four years ago, such a country as Spain was benefited by Free Trade.

"This [a fund created for helping miners with *loans*], in conjunction with the removal of the commercial restrictions, by which the progress of the country had before been cramped, but which were much diminished in 1778, by the decree of Free Trade, exercised so beneficial an influence throughout New Spain, that the produce of the mines increased (in a term of ten years) from

112,828,860 dollars (silver raised from 1760 to 1769) to 193,504,554 dollars from 1780 to 1789, when the ameliorations introduced began to produce their full effect. From 1790 to 1799, still further progress was made, the produce having amounted to 231,080,214 dollars, or more than double what it had been in 1769."

In 1810, the country was supposed to contain 500 "*reales*," or "*realitos*" (spots on which mines were worked, with from three to five thousand mines, large and small), included in the thirty-seven mining districts or departments, into which the viceroyalty was divided.

It is not necessary, indeed it would not be so interesting now, as in the time of Mr. Ward (twenty-four years ago), to go into all the different phases of Mexican mining, from the first attempt at separation of the colony from the mother country—the declension, the prostration, and the recovery of the leading interest in the state. The mines were, and are, to Mexico, what arable acres are to England or France; and no political circumstances, however violent or adverse, could annihilate this great source of the riches of the country. That source was troubled

and muddy, and dammed up for a time; but the force of its own gravity cleared away all obstacles; and thus, while Mexico never was before reduced, politically, to so low a point as at present, its material, and foremost of all, its mineral interests have not been so flourishing for forty years as now. No small impetus, let it be observed *en passant*, was given to the mining interests of Mexico by the different companies formed in England, from 1824 and onwards, for the working of Mexican mines. These companies threw an aggregate original capital into the country of, perhaps, four or five millions sterling, exclusively devoted to the improvements in mining, and its development through improved machinery, more especially in several instances, and Real del Monte most strikingly, through the splendid steam-power introduced into the country, and by the assistance of able mineral and mechanical agents.

In former times, a great part of the mining interest was managed through the agency of *rescatadores*, meaning, literally, "ransomers," a class of middle-men, who made advances to the miners, taking their ores, at prices agreed upon,

in repayment. The *rescatadores* then carried off the ores thus purchased to establishments of their own, where they were reduced, and sent as silver to the mint for coinage. These *rescatadores*, however, have very generally disappeared, more especially since the establishment of foreign and native companies, which, again, buy ores from their poorer neighbours.

It is worthy of remark here, that, in the province of Sonora, lying so close to California, and so well known for its auriferous riches, some very extraordinary specimens of virgin silver were found, nearly a century and a half ago. The discovery of the famous balls of silver, dug up at Arizona, Mr. Ward says, would be fabulous, were it not that ample proof of their existence is found in the vice-regal archives. The weight of the pieces discovered was, in all, 165 arrobas 8 lbs. (4033 lbs.), one mass of pure silver weighing 2700 lbs., and another 225 lbs. Even the vice-regal records, however, will scarcely make the first of these weights, upwards of a ton, credible in these incredulous times.

Humboldt calculated, in 1803, that Mexico had then yielded an aggregate of silver equal in

value to 1,767,952,000 dollars;* and, in addition to what I have already incidentally mentioned, it may be interesting here, to give some further instances of the mineral wealth produced in particular localities. Thus—

- 1.—In Guanajuato, the Valenciana mine averaged annually, from 1788 to 1810, 1,446,067 dollars.
- 2.—In San Luis de Potosi, the Catorce yielded 2,854,000 dollars per annum, from 1800 to 1804.
- 3.—In Temascaltepec, state of Mexico, the Real del Arriba, 600,000 dollars per annum.
- 4.—In Chihuahua, the Santa Eulalia gave, in eighty-six years, 100,000,000 dollars.
- 5.—The metalliferous dust of the famous mine of Zavala (also in the north), produced 4,000,000 dollars in two years.
- 6.—In the state of Mexico, the mines of Santa Ana and San Geronimo were so rich in their

* Or 2,027,952,000 dollars, if one-seventh be added for *unregistered* silver; but this seems a low or mistaken calculation, since it appears that the registered *coinage* of Mexico, in *one hundred and thirty-six years*, amounted to 1,708,173,436 dollars; whereas the silver raised from the mines extends to a period of *two hundred and eighty-two years*.

- yield, that, after living upon their produce during his whole life, the owner bequeathed by his will, of which Mr. Ward has an authentic copy, 4,000,000 dollars, the greater proportion of which was left to pious institutions.
- 7.—La Luz, *denounced** in 1804, and which still continues to be a celebrated mine, has given the original proprietor, “the Licentiate Gordoza, the estate of Mal Paso, near Zacatecas (for which he paid 700,000 dollars), and 1,000,000 dollars capital.” †

The value and purchase of ores are taken by the *carga*, weighing 300 lbs.: now, that may contain one *mark* (8 ounces) of silver, or it may contain any indefinite higher quantity—50, 100, 200 *marks*, and so forth—and, of course, the price of

* *Denunciar* means, to apply to the government for the occupation of a certain small space of land, for the purpose of mining, and which, the party offering to fulfil the conditions laid down in the mining code, must of necessity be conceded. Failing fulfilment within one year, the property reverts to the state.

† The mine of San Bernabé, in Zacatecas, worked by the *conquistadores*, was so productive as to give rise to this couplet, in an old song, in reference to the first owner, Ybarra, who married the viceroy's daughter:—

“Had the metal of St. Bernabé not been of such good *ley* (standard), Ybarra never could have married daughter of *viréy* (viceroys).”

the *carga* is according to the supposed, or tolerably well ascertained, quantity of silver which it contains. *Poor* ores, if they can be brought to the surface largely and inexpensively, can be worked to profit and advantage; rich ores, it need scarcely be added, can stand a high expense, and comparatively small extraction from the *matrix*.

Thus, the *carga* of the best ores in the Licentiate's rich mine sold at from 340 to 380 dollars; and in the ores from a particular level of La Purisima (at Catorce), belonging to the opulent family of the Obregons, sold at 380, 400, and even 600 dollars per *carga*. Nay, some of the ores of Santa Anita, belonging to the Marquis of Royas, during the great *Bonanza* of 1740, sold for their weight in silver, in consequence of the large proportion of gold contained in them. The ores of Real del Monte, which are at present poor, but apparently inexhaustible, are not worth, on an average, more than four or five dollars per *carga*.

It must also be observed, that the *carga* depends on another circumstance for its value; that is, the probable quantity of gold mixed up with the silver in the ore. Some ores have given as much as two

thousand grains to the mark, and some only contain pure silver. While stating this, I may say that all silver containing gold is sent for separation to the *Apartado* in Mexico, an establishment, the new one now just finished, built on the most magnificent scale, and, I presume, beyond anything of the same kind in the world.

A rich mine is, for the purpose of partial sale or partnership, generally divided into twenty-four *barras*—or shares, which, in the best mines, have sold for, and are worth, large sums of money—from so many hundred up to perhaps twenty or thirty thousand dollars each, whatever may have been their primitive value—something in the way of the Great Bridgewater Canal shares.*

* The mine of Quebradilla, when the company, to whom it belonged, was dissolved in 1817, divided 75,000 dollars on each *barra*, although the partnership had only existed seven years.