

work, has given to its present proprietor, the Licenciado Gordo, the estate of Mal Passo, near Zacatecas, (for which he paid 700,000 dollars,) and a million of dollars Capital: the best ores, during this time, have sold, according to the Registers of the mine, at 340 and 380 dollars per carga, (of 300 lbs.)

The ores of a particular level of the mine of La Purisima, which belongs to the family of the Obregons, (*el ojo del cielo*) sold for 600, 400, and 380 dollars per carga; at which price they were bought as late as 1817.*

With such attractions as these, natural difficulties are easily overcome; and I have little doubt that,

* The necessity of a class of middlemen, or Rescatadores, so often mentioned in this Book, was nowhere more strongly exemplified than at Catorce; where almost all the first discoverers were mere adventurers, and consequently unable to establish the necessary works for reducing the ores of their mines. This was done by small capitalists, most of whose establishments are still kept up by the descendants of the families, although the speculation is not now by any means what it was. Hence, the only standard of the value of the ores at Catorce, is the price which they fetch at the weekly sales, which take place at the mouth of the mine. A similar system is pursued occasionally at Guanajuato, where, from the immense mass of ores raised, it was difficult for any individual to raise works sufficiently extensive to reduce them all. The Foreign Companies wish to adopt a different system, and to unite the profits of the Amalgamater with those of the Miner; but in some mines and districts, sales are still resorted to, from the difficulty of abolishing so old a custom.

as soon as their existence in a particular part of this country is generally known, the tide of population will set in that direction; and that establishments will be formed there, which, in the course of a few years, will become of immense importance. Every day is adding to our knowledge of regions, which were formerly considered as positively inaccessible. The Sierra Madre has been traversed seven times, between Öäxäcä and Chihüahüa, by one very spirited and intelligent English traveller, Mr. Glennie, whose opinion of its riches confirms all that had been surmised in earlier days; and his conviction of the advantages to be derived from mining speculations in that direction, has induced the directors of the United Mexican Company to entrust him with the formation of an establishment at Jesus Maria, (one hundred leagues West of Chihuahua, upon the slope of the Sierra Madre,) which I consider as a first step towards that revolution in the mining affairs of Mexico, the probability of which, in the course of twenty or thirty years, I cannot but look forward to.

Some Americans have endeavoured to establish a Company for Bätöpiläs, but have not, I believe, as yet, succeeded in raising a sufficient capital.

A Mexican Company for working some of the mines of Sönörä was likewise proposed in the capital very lately, but failed; I believe, in consequence of a want of confidence in the persons who wished to promote its formation.

A similar enterprise will shortly be attempted in England, by an English gentleman, (Colonel Bourne,) who has been long a resident in Mexico, in conjunction with Mr. Escalante, the representative of the state of Sönörä in the Senate.

They have taken up contracts for the mines of Ārīzpē, (about 36° north latitude,) in a situation possessing great local advantages, a fertile country, the vicinity of two large rivers, and a communication by water with the Pacific. The mines themselves were formerly celebrated for their riches, and the capital required to bring them again into activity is very small.

The specimens which I have seen of the ores extracted from them, almost induce one to adopt the theory, that the proportion of silver contained in the ores increases as you advance towards the North; a theory which is very generally believed, at present, in Mexico, and which is certainly confirmed by the superiority of all the Northern ores to those of the richest districts in the South.

The idea probably originated in the discovery of the famous Bolas de Plata, (Balls of Silver,) of Ārīzōnä, in the beginning of the last century, which was, and probably still is, believed in Europe to be one of those fables, with which mining countries always abound.

But the attention of the present Government of Mexico having been drawn to the subject, a search was made in the Vice-regal Archives, by order of

the President, for the correspondence, which was known to have taken place respecting it in the year 1736.

This correspondence I have seen, and I have in my possession a certified copy of a Decree of Philip the Fifth, dated Aranjuez, 28th May, 1741, the object of which was to terminate a prosecution, instituted by the Royal Fiscal, against the discoverers of Ārīzōnä, for having defrauded the Treasury of the duties payable upon the masses of pure silver found there.

The Decree states the weight of the Balls, Sheets, and other pieces of silver discovered, (*bolas, planchas, y otras piezas de plata,*) to have amounted to 165 arrobas, 8lbs., in all, (4033lbs.): and mentions particularly one mass of pure silver, which weighed 108 arrobas, (2700lbs.); and another of eleven arrobas, upon which duties had been actually paid by a Don Domingo Asmendi, and which, as a great natural curiosity, (*como cosa especial*) the King states ought to have been sent to Madrid.

The Decree ends by declaring the district of Arizona to be Royal property, as a "*Criadero de Plata*;" (a place in which, by some natural process, silver was created;) an idea, to which the flexibility of the metal, when first extracted, seemed, in those times, to give some colour of probability; and by directing it to be worked upon the Royal account. This put a stop to the enterprises of individuals; —the district was deserted; an attempt to send a

sort of colony there failed; and, in a few years, the very name of Arizona was forgotten.

I am far from supposing that the whole of the facts recorded in this Decree can be taken as correct, although the authenticity of the Decree itself is unquestionable. But what one cannot adopt without confirmation, ought not to be rejected without inquiry; and I see enough, at least, in these Records of Arizona, to warrant the supposition, (confirmed as it is by the facts and appearances which I have mentioned in the preceding pages,) that the hitherto unexplored regions in the North of Mexico, contain mineral treasures which, as discoveries proceed, are likely to make the future produce of the country infinitely exceed the amount that has been, hitherto, drawn from the (comparatively) poorer districts of the South.

In how far these discoveries must be influenced by the progress of population, and in what degree the discoveries themselves may be expected to influence that progress, remains as a subject of inquiry for the fourth and last Section of this Book; in which I shall endeavour to point out the connexion between the Mines, and the Agriculture, and Commerce of Mexico, as the best mode of illustrating the effect likely to be produced by their prosperity upon a population, the general interests of which they so effectually promote.

TABLE No. I.

Produce of Bolaños from 1752 to 1780.

Years.	Marc.	Dollars.	Reals.
1752	261,681 2	2,158,870	1/4
1753	211,808 5	1,747,421	
1754	210,039 6	1,732,827	3/4
1755	238,927 2	1,971,149	3/4
1756	284,158	2,344,303	3/4
1757	251,633 2	2,075,974	1/4
1758	223,678 7	1,845,350	1/4
1759	166,106 7	1,370,381	1/4
1760	165,787 7	1,367,749	3/4
1761	127,199 2	1,049,393	3/4
1762	73,998 2	603,060	3/4
1763	68,337 6	563,786	1/4
1764	79,336 3	654,525	
1765	69,825 7	576,063	1/4
1766	79,977 2	659,812	1/4
1767	55,150 4	454,991	3/4
1768	55,152 2	455,006	3/4
1769	64,374 5	531,090	1/4
1770	59,197 4	488,379	1/4
1771	49,753	410,462	1/4
1772	49,302 6	406,747	3/4
1773	53,852 4	444,283	
1774	69,075 1	569,869	3/4
1775	69,390 7	572,474	3/4
1776	110,688 7	913,183	
1777	128,540 6	1,060,461	
1778	133,244 6	1,099,269	
1779	145,894	1,203,625	1/4
1780	147,055 5	1,213,208	3/4
Total	3,702,269 5	30,543,720	3/4

From 1646 to 1752, Gamboa states the average annual produce to have varied from three and a half, to four millions of dollars.

TABLE No. II.

Produce and Expenditure in the Mine of Valenciana from 1788 to 1810, and from 1811 to 1825.						
FIRST PERIOD.						
Years.	Total Produce.		Expences.		Profit.	
	Dollars.	Reals.	Dollars.	Reals.	Dollars.	Reals.
1788	1,571,216	2½	429,159	2½	1,142,057	0
1789	1,633,459	0½	448,133	1	1,185,325	7½
1790	1,499,939	1½	454,523	5	1,045,415	4½
1791	1,639,085	4	733,321	0	905,764	4
1792	1,049,753	0	757,173	4	292,579	4
1793	1,042,876	0½	738,354	2	304,521	6½
1794	1,282,042	0½	799,328	2	482,713	6½
1795	1,696,640	3½	815,817	6½	880,822	5
1796	1,315,424	1½	832,347	0	483,077	1½
1797	2,128,439	2½	878,789	2	1,249,650	0½
1798	1,724,437	4	890,735	5	833,701	7
1799	1,584,393	1½	915,438	5½	668,954	4
1800	1,480,933	7	977,314	5	503,619	2
1801	1,393,438	0	991,981	7	401,456	5½
1802	1,229,631	1	944,309	1½	285,321	7½
1803	1,232,045	0	937,931	6½	294,113	1½
1804	1,185,265	5	941,121	1	244,144	4
1805	1,113,756	4	946,346	6	167,409	6
1806	1,040,632	7	914,662	7	125,970	0
1807	1,191,582	2	1,019,781	3½	171,800	6½
1808	1,523,815	6	1,205,924	1	317,891	5
1809	1,385,611	1½	1,204,333	1	181,278	0½
1810	869,068	3	899,521	1½		
	31,813,486	3½	19,676,349	4½	12,167,589	5½
					Deduct loss in year 1810	30,452 6½
					Clear Profit	12,137,136 7

TABLE, No. III.

Produce and Expenditure in the Mine of Valenciana from 1788 to 1810, and from 1811 to 1825.						
SECOND PERIOD.						
Years.	Total Produce.		Expences.		Profit.	
	Dollars.	Reals.	Dollars.	Reals.	Dollars.	Reals.
1811	323,762	2½	122,687	6½	201,074	4
1812	279,599	7	144,002	7½	135,596	7½
1813	258,920	3½	238,443	1½	20,477	2
1814	305,638	6½	215,257	3	90,381	3½
1815	279,346	0	235,519	6½	73,826	1½
1816	178,512	7	149,030	5½	29,482	1½
1817	165,986	5½	136,429	1	29,557	4½
1818	174,971	1½	142,317	2½	32,653	7
1819	202,414	5½	180,743	1	21,671	4½
1820	80,183	6	63,351	3	16,832	3
1821	101,138	6½	72,809	5½	28,329	1
1822	70,450	4½	60,575	2	9,875	2½
1823	36,199	1	32,045	3½	4,153	5½
1824	117,143	5½	87,341	3	29,802	2½
1825	31,413	4	11,588	7	19,824	5
	2,605,682	2½	1,862,143	3	743,538	7½

TABLE, No. IV.

MINING DISTRICTS OF THE NORTH.

STATE OF DURANGO.

In the Sierra Madre—Guarísamēy, San Dīmās, Gāvilānēs, Tāyōltūtā, Cānēlās, Sīānōrī, Bacis, Tāmāsulā, Ventanas, San Andres.

East of the Sierra Madre—Cuēncāmē, (near the River Nazas,) Yērvā Būēnā, Māpīmī, Indēē, El Orō, Guānāsēvī.

STATE OF CHIHUAHUA.

El Pārrāl, Santa Eulalia, Batopilas, Jesus Maria, Los Pílares, Capirichie, Santa Rosa de Cosiquiriachic, El Pilar, Batopilillas, Rosario, El Potrero, Milpillas.

STATE OF SONORA AND SINALOA.

Mūlātōs, Cōsālā, Alāmōs, Arispe, El Rosario.

TABLE, No. V.

		Dollars.	Reals.
1795.	Produce	258,936	
	Expences	128,384	
	Profits	130,552	
1796.	Produce	359,361	
	Expences	136,279	
	Profits	223,082	
1803.	Produce	225,778	6 $\frac{1}{2}$
	Expences	101,416	1 $\frac{3}{4}$
	Profits	124,362	4 $\frac{3}{4}$
1804.	Produce	260,555	2 $\frac{5}{8}$
	Expences	117,240	0 $\frac{3}{4}$
	Profits	143,315	1 $\frac{1}{8}$

SECTION IV.

SOME GENERAL OBSERVATIONS UPON MEXICO AS A MINING COUNTRY; WITH AN INQUIRY AS TO THE PROBABILITY OF HER BEING ENABLED BY HER MINERAL TREASURES TO MULTIPLY HER COMMERCIAL RELATIONS WITH EUROPE, AND TO ACQUIT THE INTEREST OF WHATEVER LOANS SHE MAY HAVE CONTRACTED THERE.

It is to Baron Humbolt's *Essai Politique* that Europe is indebted for whatever knowledge it now possesses of the peculiarities by which Mexico is distinguished as a Mining country. How little was known before his time may be inferred from the fact, that Robertson, celebrated, as he so justly is, for the diligence and accuracy of his researches, in his view of the Colonial Policy of Spain, confounds, every where, the climate of Mexico with that of Peru and Chilé, and deploras the mortality occasioned amongst the natives, (whom he supposes to have been compelled to work in the mines,) "by the sudden transition from the sultry climate of the valleys, to the chill, penetrating air, peculiar to high land in the torrid zone." I need hardly state that, the idea is a mistaken one; and that however miserable the lot