them at once into activity, instead of adopting the slow process of applying the profits of the one to the wants of the rest.

With regard to former produce, the mine of Arevalo, at Chico, is stated to have paid the King's tenth upon five millions of dollars, from 1804 to 1824; or to have averaged 250,000 dollars per

The mines at Real de Arriba, in the district of Temascaltepec, produced, weekly, twelve bars, or 13.000 dollars, (yearly, about 600,000 dollars). Sta Rita, (at Zimapan,) upon the years 1791, 1792, and 1793, left a profit of 100,000 dollars: and the richness of the Gold mines at San José del Oro, led, in former times, to the appointment of a Receiver-general for the King's fifth in that district alone. The present state of the mines there, however, does not appear to warrant any immediate expectations of success.

On the whole, should the undertakings of the Company be prosecuted with vigour, the annual produce, at the lowest possible estimate, may be taken at 600,000 dollars in the year 1830; with a probability of its considerably exceeding that sum; as Ārēvālo alone, in the opinion of all the miners whom I have consulted, (both natives and foreigners,) is capable, at the present moment, of producing seven bars weekly, or 365,000 dollars per annum, could a sufficient number of workmen be procured for the extraction of the Ore.

Of the two American Companies mentioned in the sketch, (those of Baltimore and New York,) I can say little, except that the first only has effected an establishment in Mexico. The mines to be worked by both are situated at Temascaltepec, (about thirty leagues from the Capital,) and the works are conducted with great economy and activity, by Mr. Keating, a distinguished mineralogist of the United States.

With regard to the result, I have been informed that, from the tables of former produce, during a long series of years, there is reason to hope that the mines may pay an interest of from nine to fifteen per cent. upon the capital invested, which does not exceed 100,000 dollars. The completion of the works will, probably, be effected in the course of the year 1828.

The preceding pages contain the only data, upon which a calculation "of the returns likely to be made to the Adventurers by the Companies now established in Mexico," can, at present, be attempted. The result is by no means such as I could have wished, as it is founded upon conjectural evidence, and amounts, at best, to nothing more than probability; but I have no hesitation in adding that I regard this probability as strong, and that, after a very careful investigation, I see little reason to consider the expectations of the directors as exaggerated, or to suppose that, before three years have elapsed, these expectations may not be realised.

VOL. II.

If this be the case, the addition to the amount of Silver now raised, in the year 1830, might be roughly estimated in the following manner:-

ed changing all wall		Dollars.
Real del Monte Company	grain no so a Hi	. 2,500,000
Bolaños	and we want	. 2,000,000
Anglo Mexican .	suppled articles	. 3,700,000
Tlalpujahua .	esting, a dis	. 850,000
Mexican Company .	as Anthèig	200,000
Catorce Company .	luga, addiget	250,000
United Mexican .	tables of fu	. 3,000,000
German Company .	Later there I	. 440,000
American Companies .	inii non xesia	. 60,000
	Total	13,000,000
		SALES CONTRACTOR OF SALES

In this calculation I have taken the produce of the three first Companies at the estimate of their own directors.

I have allowed for Tlalpujahua what I conceive to be a very moderate sum, considering the exclusive possession by that Company of all the mines of the District, and the great riches that were, undoubtedly, drawn from them in former times, although the records of those times have been lost.

For the Mexican Company I have allowed more than their present produce would seem to warrant, in consideration of their having only just received the means of carrying on their works with vigour, by the arrival of several German miners, whose assistance, in Oaxaca, was the more necessary from the inexperience of the native miners of that state.

The expectations of the Catorce Company cannot be realised so early as 1830, as their works are now suspended: I therefore take the probable produce, in that year, much under the estimate formed in the preceding part of this Section.

For the United Mexican Company I have assigned a sum, which is small, if a calculation of the probabilities in favour of the Association be formed upon the same basis as that which has been adopted for all the rest. But Mr. Alaman's refusal to give an opinion, renders caution in a mere observer doubly necessary.

I have supposed the progress of the German Company to be slow, from the uncertainty of any addition being made to its present capital.

In all, I have given Produce, not Profits, for these, of course, depend upon the manner in which the operations of the Companies are conducted, every shilling injudiciously expended, being, in fact, so much deducted from them.*

^{*} It often happens that mines which are producing silver to a very considerable amount, yield no profit at all to the proprietors, the whole produce being absorbed by the expences. This was the case at Bolanos in 1795, when five thousand mules were employed in the drainage; and more recently, in the mines of Veta Grande at Zacatecas, which, when taken by the Bolanos Company, though producing ten thousand dollars weekly, barely covered the expences of working.

The sum total gives an addition of thirteen millions of dollars to the present produce of the country in, or before, the year 1830.

It remains, therefore, to inquire into the Second part of the question now under review, viz.:—

"The probability of the general produce of the country being so increased by these returns, (or by any other causes,) as to equal, or ultimately to exceed, the annual average produce before the year 1810."

The Coinage of Mexico, although its average amount, from 1811 to 1825, was something more than Ten millions of dollars per annum, as stated in the first Section of this Book, rather decreased, than increased, towards the latter part of this period, and did not amount in the year 1826, to more than Seven millions and a half of dollars: (Vide table of Coinage marked No. 12, Section I.) The causes of this diminution I have endeavoured to develope in the preceding Section.

It does not arise from any deterioration of the mines themselves: they are what they were in 1810, and, consequently, are equally capable of producing what they then produced: but the capital which gave, at that time, so great an impulse to the Mining interests, has been withdrawn from the country, or diverted into other channels. The outlay of the Companies is not, by any means, an equivalent for that capital; and many years must elapse before that equivalent be found: I mean,

before a system can be re-organised, that will give to every class of Mining adventurers the facilities, and advantages, which they enjoyed before 1810. A great proportion of the expenditure of the Companies consists, at present, in dead works,-Amalgamation works,-roads, and stock,-all indispensable as preparations, and highly beneficial to the country in general, but not to the interest of the miners, (I mean, those not employed in the Companies,) to whom Avios, or advances in money, are essential, which they can no longer obtain. Besides, the mining population itself has decreased, and there are many districts, in which a want of hands is severely felt. I do not, therefore, think it probable that, even under the most favourable circumstances, the produce of the country can, for some time, exceed the amount of the present coinage, added to that given by my calculation of the probable produce of the Companies, which would make a total of about Twenty millions of dollars.

To this I think it may rise in the year 1830; and should it do so, the increase afterwards will be gradual, but progressive; new mines will be brought into activity as the present scarcity of capital diminishes; and, provided public tranquillity be not disturbed, there is reason to believe that the produce of the mines of Mexico, in five years after that time (1835) will be nearly equal to the annual average amount derived from them before the Revolution.

In taking this view of the subject, I feel myself

bound to state that I have been thought too sanguine by many persons to whom I have communicated it, and, amongst others, by some, for whose general knowledge of Mexico I have the highest respect; but at the same time I must add, that the apprehensions, which I have heard expressed, originate either in causes entirely unconnected with the mines, (principally of a political nature,) or in a supposition that the errors committed by the Companies on their first establishment are still persevered in, and, consequently, still occasion the lavish expenditure, with which they were necessarily attended at the outset.

Upon the last of these points my visit to the Mining Districts has relieved me from all doubts. The Companies have served their apprenticeship: they have paid dearly for their experience, it is true; but they have learned that nature is not to be forced, and that, without the strictest attention to economy, and to all the details of management, no command of capital can ensure success. Their establishments have been reduced in consequence; and it only remains, therefore, to inquire, whether the mines are sufficiently good to cover the expence already incurred, and still to hold out a reasonable prospect of advantage? This I have endeavoured to ascertain by a reference to the only data, upon which an estimate can possibly be formed; and by instituting a comparison between the expenditure of the Companies and the former produce of the mines

worked by them, as given by Official Records: the result is comprised in one table, and it certainly does appear to be that the mines are able to pay off the whole outlay, in three or four years, provided the produce in 1829 be not very much below the standard of the average annual produce before 1810. This I see no reason to apprehend; for the mines have remained unchanged, and untouched, during the Revolution. In lieu of being exhausted by progressive workings, their riches were locked up, if I may use the expression, by the accumulation of water; and it is only now that the lower levels, from which nine-tenths of the silver raised in 1810 were extracted, are beginning to become accessible. What, then, is to prevent the produce from reaching its former standard, calculated as that standard has been, in this Book, not upon traditionary sayings, or vulgar report, (which is but too often synonymous with vulgar error,) but upon the evidence of those Records, that have survived the Revolution? More than this I do not wish at present to assume; for I think so highly of the ability and practical experience of the Mexicans in all mining matters, that I am very much inclined to believe that we have, at least, as much to learn from them, as they from us. I therefore reject, at once, all those ideas of European mining on the other side of the Atlantic, which have been attended, hitherto, with much ruinous effect: but having admitted this, it would be hard to deny that the accession of science,

and skill in machinery, which we bring into the present coalition, when combined with the know-ledge of their own country, which the Mexican miners possess in the very highest degree, and applied, gradually, in the mode best adapted to the local peculiarities of each District, must, in the end, have a beneficial influence, and must tend to increase, ultimately, the annual produce of the mines.

This has been already exemplified in more than one instance, as at Real del Monte, and Bolaños, neither of which Districts could have been worked without the aid of European science, to direct the efforts of the natives. In other districts, where capital alone was wanting, the introduction of our machinery was superfluous; in all, however, it will be hereafter of use, for there is a point, at which the machinery of the country, (however improved) ceases to be of any avail. I do not, therefore, regard the expence which has been incurred at Guanajuato, by the Anglo-Mexican Company, for machinery, (but a small portion of which is now in use,) as money lost to the Adventurers. The expence might have been avoided, and was therefore injudicious, as it increased the outlay, in the first instance, so enormously, as almost to occasion the dissolution of the Company; but a time will come, (before the contracts can expire,) when a part, at least, of this machinery may be turned to account upon the spot; while, if the impulse given to the mines continue, opportunities will be found for disposing of the remainder to Adventurers in other Districts, where the use of it would not be restricted by that scarcity of fuel, which, in Guanajuato, would render the general application of the larger engines sent out in 1825, utterly impossible.

With regard to the political apprehensions to which I have alluded, I do not feel myself at liberty to speak. The seeds of disorder certainly still exist in Mexico; and it is, unfortunately, not less certain that, were they to lead to civil dissensions of a serious nature, the mines must suffer from the effects of the struggle. But although I will not predict those halcyon days of peace and concord, which some of the admirers of Republican principles seem to regard as the necessary consequence of the system which has been adopted, I have no hesitation in repeating here, what I have stated in the preceding parts of my work, namely, that great progress has been made towards a better order of things, and that the more I saw of the country, the more I became convinced that the people were wearied out with Civil war, and desired nothing but independence and tranquillity. The race of the old Insurgents has died off; the population of the Provinces has reverted to its original pursuits; and although a struggle for place and power may be carried on with great personal animosity in the Capital, the States are indifferent as to the result, and are occupied only with their own affairs.

I am not aware of the existence of any cause,

(with the exception always of a hostile movement on the part of Spain,) that could again disorganise the great mass of the population; and it is this alone that the Companies in general have to apprehend. Partial disturbances indeed may, and probably will occur; but these are of little moment, and could hardly exercise any very prejudicial effect upon the Mining interests of the country, from which so large a portion of the Mexican community derives its subsistence at present, and to which, consequently, they are not less interested than the foreign Adventurers themselves, in affording protection.

The same observation holds good with regard to an increase of duties on the part of the Government, (of which I have heard great fears expressed here,) as soon as the mines begin to become productive anew. Upon this subject it is impossible to give the Adventurers any other security than that which they may derive from the reflection, that this increase of duties must weigh as heavily upon the Mexican proprietors, as upon themselves. The mines are private, not public, property; and the produce, (according to the terms of the contracts,) after the repayment of the capital invested by the Companies in the first instance, is to be divided equally between the Adventurers and the Mexican proprietors.

In order to favour the attempt to work the mines anew by the assistance of foreign capitals, the duties formerly paid on the Silver raised, (seventeen per cent.,) were reduced to about five and a half. There

was no pledge that, when the capitals were repaid, some increase would not be made in the duties: but there is also no reason to suppose that they will ever again be raised to their former standard, because the interests, not of the foreign capitalists, but of the very influential class of Mexican proprietors, require that they should not be so. The amount of duties was formerly fixed by the Mother-country. It now depends, not even upon the Executive of Mexico, but upon an assembly of native Mexicans, amongst whom the great Mining Districts are sure to be adequately represented. It is, therefore, hardly natural to suppose that they will give their sanction to a measure by which they themselves will be the first to suffer; nor can they, in any way, in a country which pays for all its Imports in bullion, impose a duty upon the Silver raised in such a manner as to bear upon Foreigners, without affecting themselves. I leave good faith entirely out of the question in this view of the case, because, though always appealed to, it is, I fear, of but little weight with any Government in discussions of this nature. But I cannot refrain from adding that, in the whole course of my residence in Mexico, I have seen nothing on the part of the Government to warrant the supposition, (which those who wish to regard American affairs in the most unfavourable light, so gratuitously make,) that it would violate all its engagements with Foreigners, merely on the score of their not being natives, or seek to deprive them of the fair

fruits of their labours. I believe, on the contrary, that a conviction of the advantages which Mexico derives from her intercourse with Europe, has been gradually taking root during the last four years; that many of the exaggerated ideas which were entertained in 1824, of the importance of the New World to us, have given way to a belief that this importance is (to say the least) reciprocal; and that a disposition to cultivate a good understanding with the commercial nations of Europe has increased in proportion to the increased wants which Europe is called upon to supply. I have given in the Third Book some instances of the existence of this feeling, as well as of the ameliorations to which it has already led with regard to Trade: why then should its existence be assumed as impossible, and its operation supposed not to extend to the mines, in which the interests of the Mexican and British Adventurers are much more closely interwoven with each other, than they can be in any other species of international intercourse?

The above observations are merely matters of private opinion, but as such I leave them to the consideration of my readers, who will give them as much, or as little importance, as they may seem to deserve.

I come now to the probability "of the annual average produce ultimately exceeding the Twenty-four millions of dollars, which were drawn from the mines before 1810."

This probability depends, in my opinion, in a great measure, upon the time at which the attention of the Adventurers in the Mines of Mexico is directed towards the North.

It seems, at first sight, a singular fact, in the history of a country so celebrated for a spirit of mining enterprise as Mexico, that, during three centuries, that spirit should have been confined to a comparatively small circle; and that, with some few exceptions, the richer ores of the Internal Provinces, should have been neglected for the poorer districts in the vicinity of the Capital.

But this fact admits of one simple explanation.

As long as the monopoly of the Mint of Mexico continued, it was absolutely impossible, in the Interior of the country, to obtain a sufficiency of the circulating medium to carry on any great mining enterprise; and, even to commence one, a triple capital was required, as six months elapsed before silver, sent in bars from the North, could be brought back converted into specie.

Dollars were often at a premium in Guanajuato itself; but in the North, they became an article of trade, the price of which, like that of all other articles, increased in proportion to the scarcity of the supply; so that both the Mine-owner, and the Rescatador, (amalgamater on his own account,) were obliged to convert their silver into specie at a loss of one-third of its legal value; while, for every article consumed in the mines, for which they exchanged