

# 'Inquiries concerning the 800000 Mexico and Pillar Dollars purchased by her Majesty & coyned into two Real pieces for the Spanish service'.

**Author:** Isaac Newton

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<193r>

Inquiries concerning the 800000 Mexico & Pillar Dollars, purchased by her Majesty & coyned into two Ryal pieces for the Spansih service.

Qu 1. What is the proportion of the English Troy weights to the Spanish weights used for weighing of gold & silver? A: Twenty ounces Troy weigh 9600 grains Troy & twenty ounces Spanish weigh about 8840 of the same grains. If the Gentlemen who are sent as Commissioners from her Majesty into Spain should carry with them a pound weight Troy with ounces penny weights & grains exactly made, they may weigh 20 spanish ounces at the Spanish Mint & thereby determin the Spanish weights exactly. And it is to be observed that the Spanish pound consists of sixteen Spanish ounces, but the pound Troy conteins only twelve ounces Troy and this ounce conteins 20 penny weights & the penny weight 24 grains

Qu. 2. What was teh weight of the 800000 Dollars? A. A thousand Dollars as they are brought by the Merchants from Mexico should weight 875 ounces Troy but the Merchants find that they usually weigh but 872 ounces at which rate 800000 Dollars should weigh 6976000 ounces Tory. Let the books in Spain be examined where the weight of the 800000 Dollars was entred upon delivery of the same. And say by the Rule of three, As twenty ounces Troy to twenty ounces Spanish {so} is the whole weight of the Dollars in spanish to the whole weight in English ounces & so also is the weight of a 1000 Dollars in spanish ounces to the weight of a 100 in English ounces. For example If the English ounce should be to the Spanish ounce as 9600 to 8840 & the whole Spanish weight of the 800000 Dollars should be found in the books to be 7574389 Spanish ounces, the whole English weight will be found by the Rule of three to be 6976000 ounces Troy, & the weight of a thousand will be found 872 ounces Troy. And note that if the weight of a thousand prove to be 872 ounces Troy, or within an ounce or two over or under the delivering weighing & entring the weight of the 400000 Dollars may be presumed to have been fairly performed: but if a thousand weighs above an ounce or two less then 872 ounces, there is reason to make further enquiry into the matter. For they were bought upon a supposition that a 1000 would weigh 875 ounces.

Qu. 4 What ought to be the whole weight of all the Two-Ryal pieces coined out of all the 800000 pieces of 8?

Answ. By the assay I find that Mexico Dollars are 11 ounces 1<sup>dwt</sup> fine & two-ryal pieces are one per cent worse in fineness then Mexico Dollars be encreased one per cent & you will have the whole weight of the

Two Ryal pieces including the seigniorage As if the whole weight of the Dollars were 7574389 spanish ounces, the whole weight of the Two-ryal pieces ought to be 7650133 Spanish ounces. And note that Pillar pieces of 8 are about a penny weight better then the Mexico & so need not be considered apart.

Qu. 5. What number of Two Ryal pieces ought to be coined out of all the 800000 Dollars? Ans. By the weight of four of them which was  $13^{\text{dwt}} 12^{\text{gr}}$  I found that one with another they weight about  $3^{\text{dwt}} 9^{\text{gr}}$  Troy, at which rate an 100 of them should weigh 16 ounces  $17^{\text{dwt}} 12^{\text{gr}}$  Troy Let 100 of them be weighed in Spain both in Spanish & English weight & the weight will be had more exactly. And if another 100 & a  $3^{\text{d}}$  100 be weighed & a medium be taken the weight will be had still more exactly. Then say by the Rule of three. As the weight of an hundred (whether in English or Spanish ounces) is to the number of an hundred so is the whole weight of the two Ryal pieces to the whole number of them.

<193v>

Q. 3. What was the gross weight of all the Ingots melted out of all the {8}00000 dollars? Ans. This weight may be found entered in the Books of the Spanish Mint or Mints where the Ingots were coined. And it may be also deducted pretty nearly from the weight of all the 800000 Dollars before melting. For in the melting there is a wast some of the allay fumes away & some of the silver sticks to the melting pot & to the scales of iron which come of from the pott & to the coales which fall into the pott, & some of it will spring into the fire & be scattered among the ashes, be spilt & by all this wast the Ingots will become lighter then the money was before melting by about  $\frac{1}{2}$  or  $\frac{2}{3}$  or perhaps  $\frac{3}{4}$  or  $\frac{7}{8}$  per cent. And out of the cinders & as as may be got a considerable quantity of silver be an operation which we call making up the sweep. Which silver being added to the Ingots will make up the weight of the money wanting only about the three hundredth part of the weight. And by this proportion, the weight of the Ingots arising from the money & sweep may be gathered from the weight of the moneys & on the contrary, the weight of the money may be gathered from the weight {of the} Ingots.

<194r>

For let the three hundredth part of the weight of the money be subducted from that weight & the remainder will be the weight of the Ingots proceeding from the money & sweep without any error worth considering. Or on the contrary, if the weight of all these ingots be known, let the three hundredth part thereof be added to it & the summ will be the weight of the money before melting. It must be enquired therefore what silver has been got out of the sweep or what allowance made to her Majesty for the same. And if a doubt arise about it: Let the weight of the moneys before melting be diminished by the 300<sup>th</sup> part thereof & from the remainder lett the weight of the Ingots produced by melting the moneys be subducted & the remainder is the weight of the silver which ought to be got out of the sweep & this silver or the value thereof ought to be allowed to her Majesty by him who melted the moneys into Ingots. Sometimes the Melter agrees at a certain allowance by the pound weight of the old moneys melted down to bring in so much supply of silver of the same standard, as being added to the Ingots shall make up the weight of the moneys before melting. And this allowance should be about the 300<sup>th</sup> part of the value of the silver melted.

Quære 6. What was the charge of coining the 800000 Dollars into two Ryal pieces? Ans. Besides the wast in the first melting of the Dollars into Ingots which as I said is about the 300<sup>th</sup> part of the silver melted, there is the charge of that melting to be reckoned which charge in London is about a penny for every pound weight of silver (or at least  $\frac{7}{8}$ <sup>th</sup> of a penny) that is, about the 800<sup>th</sup> part of the value of the silver melted. And there is also the Seigniorage or Duty paid for coining the Ingots into two Ryal pieces. In the Mint in the Tower before the making of the coinage Act they coined twelve ounces of silver into twelve crowns & two shillings & paid back to the Importer a crown for every ounce of silver imported & kept the two shillings for Seigniorage. What the seigniorage is in the Spanish Mints I do not know. Twenty one Mexico Dollars make 20 ounces Spanish, which makes it probable that in the Mints at Mexico, the Importer receives, back out of the Mint a Dollar for every ounce imported & the King a Dollar in every twenty ounces for seigniorage And after the same rate the Officers in King Charles mint may retain 4 pieces for seigniorage in every 20 ounces coined. For four of these pieces pass in Spain for a place of 8<sup>l</sup>. But what is the seigniorage in that mint must be

known at the Mint it self. And enquiry should also be made whether the charge of the first melting & the want or either of them be not included in the seigniorage.

Q. 7 What number of two Ryal pieces are the Queens Officers to receive out of the Spanish mint? Answ. The number received out will be found entered in the books of the Spanish Mint. And the number which ought to be received will be had by deducting the seigniorage from the whole number which ought to be produced by coinage. And if the charge of the first melting not included in the Seigniorage but has bee paid out of the new coined monies that charge must be also deducted. And note that 20 Spanish ounces of silver in the Ingots make about 100 two ryall pieces & if the seigniorage should  $\frac{1}{4}$  < insertion from the bottom of f 194v >  $\frac{1}{4}$  be  $\frac{1}{4}$  of those pieces & all other charges about half a piece, there would remain to the Queen about  $105\frac{1}{2}$  two ryall pieces for every 20 Spanish ounces of Ingot, that is for every 21 Mexico & pillar Dollars. And at this rate her Majesty for the 800000 Dollars should receive out of the spanish Mint about 4200000 two Ryal pieces.

The charge of melting the Mexico Dollars into Ingots (if it be not included in the Seigniorage) is to be born by the Queen, & may amount to a two ryal piece for every 200 Dollars or to 4000 two ryal pieces for the whole.

< text from f 194r resumes >

Qu. 8. What is the value of a new piece of 8<sup>t</sup> in Spain? Answer. Since the year 1686 the Spanish money has been raised 25 per cent & new Sevil pieces of 8<sup>t</sup> coined accordingly About nine years ago I examined two new Sevil pieces of 8 dated 1691 & 1700 & pound them standard & they weighed 14<sup>dw<sup>t</sup></sup> wanting a grain or two & so were in value 3<sup>s</sup> 7<sup>d</sup> $\frac{1}{5}$  which is just four f{illeg} the {old} pieces of eight. These new pieces &c

These new pieces for 8<sup>t</sup> Ryalls the {t}he Ryall pieces of King Charles must go in Spain for a quarter of these new pieces. And if the old Dollars have not been raised in Spain from 8 Ryals to ten but still go only for 8 Ryalls, (for I have not yet informed my self of this particular) then four of the two-ryal pieces of King Charles must in payments be reckoned equivalent to a Mexico Dollar. I do not say that they are of equal value to the Refiner for the melting pot, but only of equal value in payments to the army & people of Spain.

– including the Seigniorage And so far as I am yet

The seigniorage is a Duty paid by the Importer for coinage & how much it is must be know at the Spanish Mint. In the mint in the Tower before the making of the coinage Act, twelve ounces of standard silver were cut into 12 crowns & two shillings & the 12 crowns were deliverd for seigniorage Twenty one Mexico Dollars make 20 ounces spanish & {since} its probable that the Importer receives out of the Mexico mints 20 Dollars for his 20 ounces & a Dollar is detained for seigniorage. At this rate four two Ryal pieces should be the seigniorage for coining 20 ounces in King Charles's mint. For a Mexico Dollar or piece of eight is a piece of eight Ryalls. About 25 years ago I examined two new Sevil pieces of 8<sup>t</sup> dated 1691 & 1700 & found them standard & lighted by a fift part then the old pieces of eight. And these two-Ryal pieces by their name go for quarter pieces of eight, being about a quarter of the new pieces of eight which go for as much as the old ones.

In twenty spanish ounces of these new two-ryal pieces there are about 109 pieces of this money. If four of them be detained for Seigniorage, the Queen should receive 105. Twenty ounces of Ingot has been allayed with the fift part of an ounce of copper or perhaps with a quarter of an ounce & so should produce 11 pieces of two ryals or  $110\frac{1}{4}$ . Therefore let the books of the Spanish mint or mints be examined to see what weight of Ingots has been coined, what allay has been put to the Ingots, number of two-ryall pieces has been delivered out of the Mint for the service of her Majesty & what number has been detained for seigniorage. Also let the laws of that mint be enquired into as to the weight & fineness of the money & the seigniorage & how far the master of that Mint or Mints has observed those laws. And particularly how it comes about that the two Ryal pieces are coarser by about 1 per cent then the Mexico Dollars, whether it be by the law if the Mint or by the error of the Master & worker; & how it comes about that the two Ryal pieces are about four per cent lighter then a quarter of the new pieces of 8 or then a fift part of the old ones, or that 20 ounces make 109 pieces, whether it be by the law of the Mint or by the fault of the master of the Mint; & who has had the advantage of the lightness. For if the Master of the Mint has made any advantage to himself either by the coarseness or by

the highness of the money he ought to make satisfaction. As for instance, {if} by the {law} of the Mint Master {ought} to coin 20 ounces into 104 or 105 pieces & has coined them into 109 pieces, the question will be, Who has had the advantage of the excess

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