

# 8 REALES COBS OF POTOSI



Emilio Paoletti

## ERRATA

Because of a printing error:

The symbol ° should be read 1/2

The symbol ~ should be read 1/4

ENGLISH	
page	reference
26	2° paragraph
35	coin 32
39	coin 39
39	coin 40
43	coin 44
89	1° paragraph
191	coin 304
230	1° paragraph
246	coin 425

SPANISH	
página	referencia
277	6° párrafo
288	6° párrafo
284	1° párrafo
287	moneda 39
287	moneda 40
313	6° párrafo
316	moneda 129

# **8 Reales Cobs of Potosi**

*Second Edition*

*Emilio Paoletti*

*Translated by Lic. María Woolson*

*Buenos Aires, 2006*

Second Edition

*After concluding the distribution of the First Edition of the book « 8 Reales Cobs of Potosi», we received repeated requests for a subsequent edition, which we present here in a more comprehensive and updated bilingual Second Edition.*

*This new Second Edition includes some text modifications and the inclusion of additional material. Consequently, the numbering of pieces presented and catalogued does not correspond to the numerical order of the First Edition.*

*To facilitate the reading of both numerical sequences, we have inserted a table at the end of the volume. The table comprises two side-by-side columns containing the numerical sequences from each edition, so the reader can match the diverging numbers.*

*The English version of this book has been translated by Lic. Maria Woolson, with technical revisions by numismatic expert Daniel F. Sedwick. A Spanish version of this Second Edition is included following the English version, for those readers who would prefer it in its original language. Photographic reproductions have been omitted from the Spanish section of the book, since coins can be viewed in the English version following the coin numbers.*

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«DESCRIPTIO ARGENTI FODINARVM POTOSI»,  
engraving by Jodocus Hondius, as published in Petrus (Pierre, Pieter)  
Bertius' *Tabularum Geographicarum Contractarum*, Amsterdam, 1616.

*courtesy of Jorge Proctor*



## FOREWORD

by Daniel Frank Sedwick

Cobs are not easy. Struck and cut by hand under less-than-ideal supervision, cobs are far harder to read than the later, machine-made coins, and are necessarily less plentiful. Understanding them requires many years of experience—or at least good reference books.

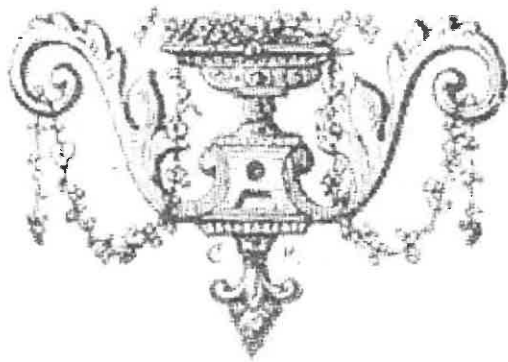
Potosí's cobs became much less mysterious with the 1971 publication of the book *Las acuñaciones de las cecas de Lima, La Plata y Potosí* by Dr. E.A. Sellschopp, a numismatic pioneer who realized the importance of studying exact die details and not just dates and assayer-marks (which are quite often missing on cobs). Some of his erroneous assumptions were superseded by new research by other experts in the 1980s and early 1990s, but it was not until 1999, with Paoletti's first edition of *Macuquinas de 8 reales de Potosí*, that a new book compiled all those changes in another die-study like Sellschopp's, presenting many new and valid arguments by Paoletti himself.

Collector reaction to Paoletti's book was electric. With Potosí cobs coming onto the market by the thousands from newly found shipwrecks like the *Atocha* of 1622 and the *Capitana* of 1654, Paoletti's book proved to be an extremely useful reference. The only problem was that most of the new, shipwreck-spawned collectors could not read the Spanish text!

This new English edition, therefore, should be even more useful, and in the intervening years from the 1<sup>st</sup> edition to this one, several new coins and more new research have come around, enabling Paoletti to produce the most accurate reference ever published for Potosí 8-reales cobs.

In addition to its numismatic thoroughness and accuracy, Paoletti's book also presents insights into the socio-economic and political backdrop of Spanish and colonial American history. Paoletti shows how historical events and movements—so often neglected by numismatists—both affected and were affected by the minting at Potosí.

Yet this book was obviously and primarily written by a cob-lover. For each and every entry the author presents top-quality photos of the coins themselves and explains not only the critical elements but also the nuances in beauty—and also the inevitable flaws—that each unique coin possesses. This is not a story of perfection—in fact, Paoletti goes out of his way to avoid delving into the more-perfect (and vastly more expensive) “Royal” presentation pieces made at the mint. Rather it is a practical guide, a textbook to be used by anyone and everyone who cares about Potosí cobs.



## ACKNOWLEDGMENTS

I would like to thank all the experts in the field who with their comments and support encouraged me in the compilation of this volume. In particular I would like to thank my friend and renowned numismatist, **Héctor Carlos Janson**, who through the years introduced me to the world of Spanish American Coins, and whose talent and patience helped make this book the best quality possible.

I would also like to acknowledge the dedication and careful work of **Lic. Maria Alessandra Woolson**, whose extensive knowledge of the Spanish Viceroyalty Period in South America contributed to the writing and translation of this Volume's text and provided a scholarly, fluid and elegant narrative style.

Additionally I would like to thank **Lic. Arnaldo Cunietti Ferrando**, whose research facilitated this body of work, and journalist **Sulim Granowsky**.

Special thanks to numismatist expert **Daniel Frank Sedwick** who oversaw the technical translation of terms.

For the production and compilation of this Second Edition I would especially like to thank the collaboration and suggestions received from **Mr. Daniel F. Sedwick, Jorge Proctor, Juan Cayón and Richard Ponterio**. With gratitude I would also like to acknowledge my friend **Paul Stossel** for his many recommendations on Chapters III and IV of this volume.

Emilio Paoletti



## INTRODUCTION

*The purpose of this book is to catalog Spanish American 8 reales cobs coined by the mint historically located in the Villa Real de Potosi, since its early productions in 1573/75 until the final year 1773, and to graphically reproduce them for easy identification and comparison amongst pieces.*

*The intention of this book is not to simply describe each coin, but rather to place a given piece within its historic period and to offer a comprehensive analysis that connects the cob to the larger socio-economic and political framework of the times.*

*All pieces are described and reproduced – both obverse and reverse – and are **part of the personal collection of the author**, except for those specimens specifically noted otherwise.*

*Undated period coins have been selected into groups (by assayer and stylistic elements) to provide a progressive sequence through the years prior to the first dated coin, in 1617. After that, coins are classified by year up to 1773.*

*The description is limited to 8 reales silver coins, which due to their limited use as common currency, are typically preserved in better conditions. Additionally, the size facilitates a more accurate analysis of all features, thus making possible the research of its evolution – or regression – throughout the 200-year production.*

*To include lower denomination coins of 4, 2, 1, 1/2 and 1/4 real (which are occasionally mentioned) would mean to exhibit so high a number of combinations and variants as to tire any reader.*

*Minting differences within a period have been minimized and reduced to specific information used only to emphasize details that reveal a stylistic group connected to a historical period.*

*Stressing cases of double striking or potential errors made by the engraver during preparation of the die is pointless, as is paying too much attention to superimpositions, unless the anomalies mean a fundamental feature for classification. Excluded are also the Royal and Heart cobs, because their production and destination were circumstantial. These same criteria were applied when considering a cob minted twice in the Spanish colonies for the purpose of revalidation (1650/52), or a different destination (colonies of other European, Oriental or Latin American countries). To include any of the mentioned variants would alter the true objective of the book.*

*Emilio Paoletti*

**List of Spanish Kings**  
**During the Minting Periods of Potosi's Cobs**

	DATE OF BIRTH - DECEASED	DURATION OF MONARCH'S REIGN	MINTING PERIOD
<b>PHILIP II</b>	1527 – 1598	1556 – 1598	1573 – 1598
<b>PHILIP III</b>	1578 – 1621	1598 – 1621	1598 – 1621
<b>PHILLIP IV</b>	1605 – 1665	1621 – 1665	1622 – 1666
<b>CHARLES II</b>	1661 – 1700	1665 – 1700	1667 – 1701
<b>PHILIP V</b>	1683 – 1746	1700 – 1724	1701 – 1724
		1724 – 1746	1728 – 1747
<b>LOUIS I</b>	1707 – 1724	1724	1725 – 1727
<b>FERDINAND VI</b>	1713 – 1759	1746 – 1759	1747 – 1760
<b>CHARLES III</b>	1716 – 1788	1759 – 1788	1760 – 1773

## Assayers List for Potosí's Cobs

Minting Period	Assayer	Initial
<b>Crowned Shield</b>		
1574 – 1576	Alonso de Rincón	R
1576 – 1577	Miguel García	M
1576 – 1577	Unknown	B
1577 – 1578	Unknown	L
1577 – 1578	Unknown	C
1578 – 1586	Juan Ballesteros Narváez	B
1586 – 1589	Juan Álvarez Reynaltes	A
1590 – 1591	Baltasar Ramos Leceta (monog.) - I Period	RL
1591 – 1602	Juan Ballesteros Narváez with brother and son	B
1602 – 1613	Baltasar Ramos Leceta – II Period	R
1613 – 1616	Agustín de la Quadra	Q
<b>Dated Crowned Shield</b>		
1616-1617	Juan de Muñoz	M
1618	García de Paredes Ulloa (monog.)	RAL
1618 – 1621	Juan Ximénez de Tapia – I Period	T
1622 – 1629	Martín de Palencia	P
1627 – 1639	Juan Ximénez de Tapia – II Period	T
1637 – 1640	Pedro Treviño (monog.)	TR
1640 – 1647	Felipe Ramiro de Arellano (monog.)	FR
1644 – 1648	Juan Ximénez de Tapia – III Period	T
1646	Gerónimo Velázquez	V
1647 – 1649	Pedro Zambrano	Z
1649 – 1651	Juan Rodríguez de Roas	O
1651 – 1652	Antonio Ergueta	E
<b>Pillars of Hercules</b>		
1652 – 1679	Antonio de Ergueta	E
1679	Manuel de Cejas	C
1679 – 1684	Pedro Villar - I Period	V
1684 – 1697	Pedro Villar – II Period	VR
1697	Sebastián de Chavarría	CH
1697 – 1701	Tomás Fernández de Ocaña	F
1701 – 1727	Diego Ybarbouru	Y
1728 – 1732	José de Matienzo	M
1732 – 1733	Unknown (monog.)	YA
1733 – 1737	Esteban Gutiérrez de Escalante	E
1737 – 1740	Pedro Manrique de Jiménez	M
1740 – 1742	Diego de Puy	P
1742 – 1744	José Carnicier	C
1744 – 1760	Luis de Quintanilla (lower-case q)	Q
1750 – 1751	Esteban Gutiérrez de Escalante	E
1753 – 1754	José Caballero	C
1760 – 1773	Raymundo de Yturriaga	Y
1760 – 1773	José Vargas y Flor	V

# Chapter III

DATED COBS WITH CROWNED SHIELD



## BEGINNING OF DATED COINS, 1617

### ASSAYER JUAN DE MUÑOZ (?)

#### INITIAL M

Over the last few years of Ramos Leceta's duties and during Quadra's brief period, the quality of coinage from Potosi deteriorated, primarily due to low weight and fineness, compounded by other irregularities at the Mint. These practices not only had a negative effect on Spanish trade of precious metals and damaged the Spanish crown interests, adulteration of such large quantities of metals reaching the mainland created a financial and economic crisis (financial crisis and economic recession) throughout all of Europe, with repercussions on its political and social structure.

In an attempt to resolve these serious problems, the metropolis sent reliable individuals to reorganize the Mint. After completion of investigations and proceedings, Juan Ballesteros lost his title of assayer and several officials were convicted of crime. But these measures were not enough to reestablish public confidence in Potosi's currency. A change in the coin's image, modifying the design and establishing a newly reliable minting became necessary to guarantee the credibility of the monetary symbol. Innovations involved the inclusion of dates on the coin. The year 1617 has the honor of marking the beginning of such practices.

Consequently, 1617 became a key landmark for the minting of Potosi cobs. This year marked the end of almost 45 years of undated coinage and the beginning of a new period, characterized by the inclusion of the issuing year engraved on the reverse. The new system suggested a volume control of currency issued for circulation, which would be easy to track back to a defective consignment in case of adulteration.

Documentation supporting the identity of the individual represented by initial M has not yet been identified. This initial first appears when Gaspar de Heredia becomes the new official assayer but does not apply his own initial. Could it be Muñoz who was entrusted to face up to the variations applicable to the new coins? The vast number of known variants constitute a clear reflection of the existing uncertainty and of the search undertaken to identify a final satisfactory design. We will attempt to provide a sound version of the most relevant alternatives.

#### M 1

#### M over Q

The work of M begins by a punching of his own initial over Quadra's. Understandably, the coins' characteristics do not differ from Quadra's last group, including the period separating P from the assayer's initial.



**N° 136. 26.3 grams**

**A well centered piece. Obverse: the curvature of a preexisting Q is visible along both the left edge and base of the M. Also evident is the period separating initials. A Y is used in the text. Reverse: castles are identical to those on Q coins; lions are rampant.**



**N° 137. 27.4 grams**

The curvature of a preexisting Q is visible along both the left and upper sides of the M. The Q's tail is noticeable below the initial. The obverse reads Phylippus with Y and the separation period is present. Lions and castles are the same as on the previous coin.

**M 2**

**Isolated Initial M**

While maintaining the former design, new dies are authorized with only a change in initials. Fineness is improved by strict observation of prescribed percentages of alloy. No identifying element is introduced to establish the production year. This period coincides with 1616 or early 1617.

This coin is easy to identify as a former type, because the legend Hispaniarum Rex on the reverse is so extensive, to infringe into the space later occupied by the date. The inner borders are complete to the full length of the legend. Y is still used. The obverse has five fleurs-de-lis and the same design as Q. A period separates P and M. No major changes affect the reverse: castles are more stylized and most of the lions are rampant.



**N° 138. 25.2 grams**

A pleasant coin with well defined drawings, but unfortunately cut down along the edges to resemble a rounded Royal coin. This last detail damages the legends but enables a clear reading of the word REX before the small separating cross.



**N° 139. 27 grams**

**An example of sloppy coinage. Legend ET YNDYARUM is extended, leaving no space for the date. Remaining details are common to coins of its type.**



**N° 140. 27.3 grams**

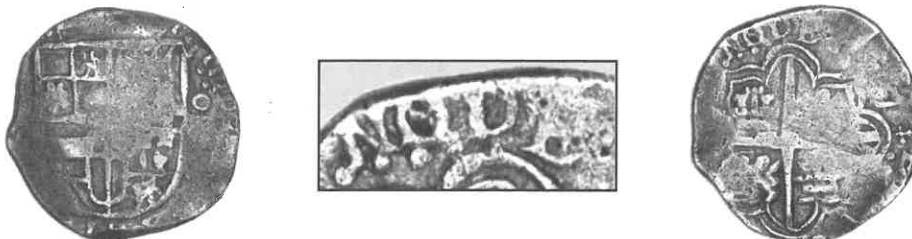
**Piece defined by an irregular disc. Most of the coin's details are evident. Obverse: heraldic shield is somewhat blurry; the text following D.G. reads DY HYSpanyarum. Reverse: rampant lions are rough and have exchanged positions with castles. Letter Y is used. Legend concludes with the word REX leaving no space for the date.**

**There are also examples bearing the numeral to the left of the coat of arms and the initials PM to the right.**

**M 3**

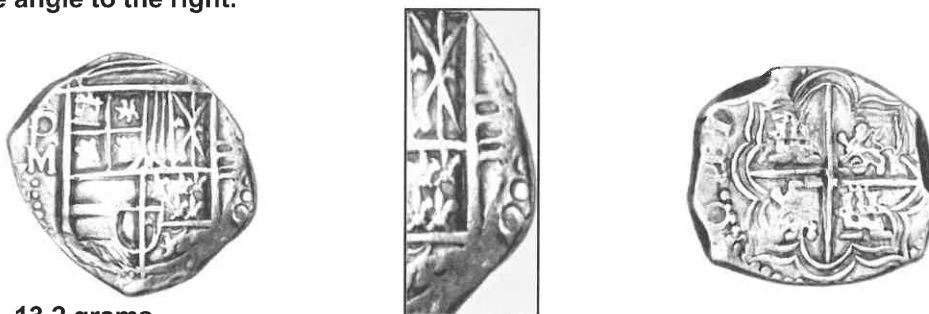
### **FIRST COINS BEARING DATE 1617**

To comply with instructions to include the date without altering the existing design, the text on the reverse is reduced to ET INDIARUM REX and the remaining space occupied by an inscription depicting the expression AÑO DEL SEÑOR 1617 complete with the usual final star. To facilitate legibility of the year, the internal inner border below the date is omitted. The final version of the drawing is achieved interpreting the different variants, whose progression we understand to be the following:

M 3/A ANO DEI 1617

## N° 141. 13.2 grams

Unfortunately our only available cob is a piece of 4 reales in poor condition. The small shield of Castile and Leon on the obverse presents a blank space where there should have been lions. The reverse reads NO DEI and a final 7 corresponding to the year 1617, with enough blank spaces to exactly fit the complete date. The inscription ends at a 30 degree angle to the right.



## N° 142. 13.2 grams

Another piece of 4 reales bearing the inscription ANO DEI, where the numeral 7 is visible at the end of the date. Castles missing on previous piece are placed within the small shield of the obverse. The anomalous detail, which will not be repeated, is a number 4 on the obverse indicated by four transverse bars. Their inaccurate composition demonstrates these are transition coins.

M 3/B ANO D 1617

The second attempt at dating coins while maintaining a former design simplifies the word DEI to a D. On the reverse lions are rampant and castles still resemble forts.



## N° 143. 27.4 grams

A beautiful coin. On the obverse all details of the heraldic shield are present. Next is the separating period between P and M. The reverse includes the design of Castile and Leon; legend clearly reads X ANO D.16 (meaning REX YEAR D 1617).



N° 144. 26.9 grams

Coin formerly of the Burzio Collection. Despite being coined on an uneven planchet, the minting is sharp, bestowing beauty to the reverse of the piece with its clear details. The design is similar to the previous, although the countermark of 480 Reis hinders the visibility of the D. Consequently, the legend reads NO -space covered by countermark- 1617 (corresponding to the legend REX ANO D 1617).



N° 145. 27.3 grams

Despite a weak imprint, characteristics corresponding to the group can be identified. Obverse: no punctuation is present between initials P and M. Reverse: D is not legible but the blank space allows one to infer the legend ANO D 1617.

M 3/C A.D. 1617

During the third phase, the text ANO D is simplified to A.D. plus the year's numerals. The remaining characteristics are identical to previous coins.



N° 146. 23.4 grams

This coin was salvaged from the shipwreck Nuestra Señora de Atocha. Corrosion has reduced its weight. Details remain clearly visible. On the obverse the lack or presence of a separating period over the M cannot be verified. The text on the reverse, REX A D 161, should be interpreted as REX A D 1617.

**M 3/D ANO 1617**

After a last attempt to refine the text, the following will prevail on all future coins: ET INDIARUM REX ANO 1617.

**N° 147. 27.4 grams**

A slightly damaged piece with clear details and good general presentation. The M on the obverse is unclear and has been touched up. Initials are separated by a period. Legend on the reverse is perfectly legible as X ANO 1617. A typical coin for its group.

**N° 148. 27.1 grams**

Lack of uniformity of the planchet is responsible for the uneven strike. Those portions of the obverse that do stand out are clear and beautiful. The only missing item is the impression on the thin section of the disc. The reverse reads NO 1 next to which enough spaces could fit numbers 617 corresponding to the date. The shield of Castile and Leon is very clear.

The search for design was a continuous task which did not discredit other less successful attempts, such as modification of the denomination (to the right of the shield), which was rendered alternatively as: (1) an Arabic 8; (2) Roman numeral o-V-III, with the three bars below the V; (3) Roman numeral o-III-V, with the three bars above the V; and (4) Roman numeral o-VIII, the three bars attached to the right of the V.

It can be inferred that assayer M concluded his production in 1617 because the initial M is not seen on coins dated 1618.

**ASSAYER GARCÍA PAREDES ULLOA (?) 1618****INITIALS PARL (MONOGRAM)**

This assayer is difficult to identify from the few existing coins, all dated 1618. An elegant and strange monogram, consisting of letters P A R L, combined alternatively. No documents have been found to attest to the meaning of the monogram or the name it represents. Initially, some experts thought it referred to Ramos Laceta, but this hypothesis is spoiled by the mention of the fraud proceedings initiated in 1617. More acceptable would be to assign authorship to García Paredes Ulloa. This is only based on the fact that he held a position as mint official during that period, and the letters coincide with his last name. We choose to apply this solution.

Design lines are clear and coins are well struck. Earlier features by assayer M are repeated, still omitting the small pearls beneath the year. Alloy is good, most likely a consequence of the previous judicial proceedings.

**N° 149. 6.7 grams**

This photograph shows a 2 reales cob, which despite being salvaged from a shipwreck, maintains on the reverse a clear monogram and king's ordinal. Along the edges of the reverse, lacking the lower inner border, the inscription XANO 1618 is clearly legible. This coin and its details confirm that Paredes minted coins in 1618.

**N° 150. 13.3 grams**

A lower-denomination coin of 4 reales. This is one of only a few coins by this assayer that show a clear monogram on the obverse. On the reverse there are signs of the date, hinting with difficulty at the base of a 1, a 6 and an 8. Castles and upright passant lions are typical signs of this assayer.



**N° 151. 26.2 grams**

**A cob of 8 reales. Despite the design's lack of clarity and its rusty sections (as well as its consequent loss of weight), the obverse outlines the monogram and the reverse shows the year 1618.**

***S.B.C.: lot No. 625.***



## COBS WITH FINAL DESIGN OF CROWNED SHIELD

After the attempts of 1617 and the first ephemeral production of 1618 began the normal production of cobs with final crowned shield design, which remained unaltered until 1652, except for a few minor variants.

Almost all period pieces are crude, with irregular blanks, careless minting and difficult legibility. All the obverse is confusing, the Heraldic shield design as well as the mint and assayer's initials. There are still five fleurs-de-lis. The eagle from Tyrol and lion of Flanders are two unrecognizable images. The same holds true for the Brabant lion, its head peeking out from the shield's edge. On the reverse, the internal inner border is complete, drawn below the date, creating a difficult interpretation of the year's numerals.

The manifest of Lamberto Siena (1802), Secretary of the Treasury of the Royal Mint of Potosi, confirms the Crown's receipt of its royal fifth during all 24 years, as well as the right to *COBO* covering all of the mint's costs. In reality, for some specific years there are no known pieces with a corresponding date. The latest could be the consequence of either a practice by colonial authorities to register the collection of the Royal Fifth and *COBO* while producing only stamped ingots rather than coins, or that the deplorable appearance of the coins led to a systematic smelting of those pieces through the years.

We hope that, some day, coins of clear identification will surface and experts will fill the current gap.

While studying this 24-year period, it is necessary to disassociate the assayer from the individual whose initials were applied on the coins. This task is indispensable because the recipient of the official title of assayer never acted directly, but rather through his deputies, whose initials ultimately appeared on the coins. Consequently, there were periods with two people in charge, who would alternatively inscribe their initials, and other periods where the change occurred without any considerations on the coins.

In an attempt to ease the distinction of this period's phases, we present a summary of assayers and lieutenants who applied their initials on the coins.

### A)

**1619-1626. Juan de Ballesteros, "el Mozo", assayer. Delegated his duties.**

**1618-1621. Deputy Juan Ximénez de Tapia (T), first period. Coins between 1622 and 1623 are also attributed to him, although they are not conclusively documented or clearly reproduced.**

### B)

**1626-1633. Juan Martel de León, assayer. Delegated his duties.**

**1622-1628. Deputy Martín de Palencia (P). Pieces from 1621 have also been attributed to him, despite concrete evidence against it. Pieces from 1625 and 1627 included in auction catalogs and studies do not confirm this information.**

**1627-1640. Deputy Juan Jiménez de Tapia (T), second period. There is certainty with regards to his role between 1627 until 1635. Due to his continuous presence at the Potosi mint, Tapia sporadically applied his initials between 1636 and 1640. There are no coins with initial T between 1641 and 1643.**

### C)

**1634-1647. Juan de Figueroa, assayer. He apparently also delegated his duties. He lost**

his title during the penal proceedings of 1647.

1644-1648. Deputy Juan Ximénez de Tapia (T), third period. Intervention during 1643 is also attributed to him, but evidence is unreliable.

1637-1647. Deputy Pedro Treviño (TR). In 1640 there was an apparent change of initials to an FR monogram. Some experts interpret this as a deputy change, hypothetically for Felipe Ramírez de Arellano.

1646. Deputy Gerónimo Velázquez (V).

1647-1649. Deputy Pedro Zambrano (Z).

D)

1649-1652. Assayers did not delegate duties and applied their own initials.

1649-1651. Juan Rodríguez de Roas (O).

1651-1652. Antonio de Ergueta (E).

The dates representing a change in assayers and time periods for those in charge of engraving their initials do not coincide. This was likely the result of administrative inertia and routine or favoring the interests of parties involved in the poor management of Potosi, beginning with the exploitation of the mines and ending with the quality of the coins. Assayers were hardly ever present during operations, only concerned with obtaining the maximum profit from the concession.

**This book only deals with the parties responsible for applying the initials to the coins, with no distinction between the titles of *lieutenant* and assayer.**

## ASSAYER JUAN XIMÉNEZ DE TAPIA, FIRST PERIOD, 1618-1621

### INITIAL T

Tapia headed a group of alternating assayers, a practice which ended once the Crown decided to clean up the chaos reigning in Potosi by means of the reform of 1652 and assignment of assayer Ergueta to enforce a stable period.

With his initial T, Tapia fulfilled his duties between 1618 and 1621. Apparently he interrupted production during 1622 and after a 5-year break he resumed duties in 1627 with a slightly different T.

### T over PARL, 1618.

When he assumed his position as assayer, Tapia superimposed his initials over the monogram PARL. These very scarce coins maintain, as expected, the same characteristics of the previous period. Their importance is fundamental because they confirm that Garcia Paredes only acted in 1618 and that Tapia did not operate before that date.



### N° 152. 27.2 grams

A damaged piece, once buried. On the obverse, the remnants of a prior assayer's initial can be seen under Tapia's T. The bottom left exposes the downward line of the R and, to the right, the diagonal line of the A and lower line of the L. Also evident is the superimposition of a P over the Mint's initials, although smaller in size as if concurrently engraved with the T. No date can be identified on the reverse, but the position of the R from REX confirms the presence of a space for the date. It is unusual that below this space the inner border was not omitted as in other Paredes coins. Lions and castles are transposed.

### 1618 T

During the second half of 1618, Tapia began striking with his own initials. Even if no date can be established, Tapia's coins can be identified by their well-defined outline. The T is robust as is the mint's P, neither big in size. An obvious and raised Greek cross divides both initials. Alloy is good, admitting an easy and clear imprint despite the poor engraving of the dies. The inner borders have big dots. Phillipus is written with one P and the circle located above the VII is disproportionate. Legends bear a Greek Y instead of a Latin I.



**N° 153. 27 grams**

We include this piece with reservation. Obverse: the mint's initial is a P engraved over an existing P, as on the previous coin. Present in the middle is the dividing Greek cross. The space reserved for the assayer's initials is vacant. Reverse: the end of the text bears a partially noticeable but clear 8, verifying its issue in 1618. The broad castle door, the lack of two windows and the presence of a base in the upper battlements separate this design from that borne on Tapia's coins. It's doubtful to say whose coin this really was since it presents elements similar to both Paredes and Tapia.



**N° 154. 27.4 grams**

This piece is certainly Tapia's, minted in 1618. Obverse: the dividing Greek cross is clearly visible between the two initials (P and T). Emblems of Castile and Leon on upper quadrants of the crowned shield are inverted with those of Catalonia, Aragon and Sicily. Reverse: rampant lions are big and crude; castles are identical to type Q3 and M. This shows that Tapia repeated elements of previous assayers. The year's numerals 1 and 8 are visible. There is a hole at 4 o'clock.



**N° 155. 27.1 grams**

Obverse: similar to previous coin, with both initials and the Greek cross well defined and a clear legend showing the king's numeral. Reverse: castles and lions are swapped. Castles no longer resemble a fortress; its lines are slender because a small line replaces the thick, double-lined, heavy base of the castle. The door is relatively large. Above it are two small windows and battlements resembling four smaller windows with three crenellated towers on top. The date's numbers 1 and 8 are clearly visible. The 8 is incomplete, only the lower half showing.

**1619 T**

Production in 1619 is similar to the that of the previous year, although on the obverse the Greek cross that separated initials has been replaced by a dot that highlights the T, which in this case bears two small downward wings on its horizontal lines.



**N° 156. 27.1 grams**

A coin formerly of the Calbeto collection. The obverse is blurry although sufficiently clear to distinguish the dividing period replacing the Greek cross between the P and T. Also evident are the T's features, typical for that year. Reverse: same as on the previous piece. Castles did not change with respect to 1618 coins; lions are rampant, slightly slimmer and reclined, with an upright tail. The numerals 6 1 9 are clear, despite the 6 being cut in half.

**1620 T**

Pieces from 1620 do not undergo substantial changes with respect to the previous year. The only prominent variation is the Greek cross separating the initials once again (like in 1618). Initials bear thicker lines.



**N° 157. 26.5 grams**

On the obverse, the cross is visible between letter P and T. Lions on the reverse are a little slimmer and more slender. Castles are very clear and repeat the previous year's design. Numerals for the year 1620 are sharp, with a Z replacing a number 2 and with a smaller 0.

**1621 T**

Several questions should be raised prior to describing pieces from 1621. Did Tapia mint during the reign of Phillip III or Phillip IV? Did his duties end towards the end of 1621 when his successor Martin de Palencia began production?

Phillip III died on March 31, 1621. We can assume there was no reason to change routines prior to his death. Delivery of instructions from the metropolis to authorities on the new continent –and its execution- probably took several months, so potential changes could have happened only during the second half of 1621.

On coins No. 158 and 159 shown below, wear and tear of the pieces prevents the king's numeral from showing, so the pieces cannot be attributed to a particular monarch. On the contrary, coins numbered No. 160 and 161 bear very clearly numerals corresponding to Phillip IV.

Aside from these questions and with no accurate documentation, we think that Tapia continued minting after the death of Phillip III with a new ordinal IIII until late 1621. Only in 1622 did initial P (for Palencia) follow.

Lions on the reverse look like running greyhounds, elongated and leaning forward, the back left leg displaced from the center of the animal where it would be if the figure were proportionate. On all coins a Greek cross separates initial P for the mint from Tapia's T.

Until new coins can clarify the uncertainty, the only alternative is to show the piece lacking the king's ordinal, followed by those bearing the identifying sign IIII of Phillip IV.

**Group A, type with no legible ordinal**

**N° 158. 25.8 grams**

**Obverse: visible Greek cross and T, lacking king's ordinal. Reverse: normal castles and lions resembling greyhound dogs. Year's last two numerals are very visible, depicting a Z1, which correspond to 1621.**



**N° 159. 27.2 grams**

This coin lacks both the year and the king's ordinal. It can be easily attributed to the year 1621 because it bears all general characteristics of Tapia's pieces coined in 1621. The obverse includes the classic P, a robust T and a thick Greek cross. On the reverse lions are typical greyhounds as on the previous piece.

**Group B, type with a legible ordinal**



**N° 160. 27.3 grams**

A beautiful coin. Obverse: initials and the dividing cross are very clear; the heraldic shield is good and part of the king's numeral is showing. Reverse: classic castles and lions resembling greyhound dogs, a clear 6Z1 (1621) where the 6 is truncated.



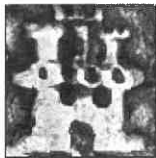









**N° 161. 26.8 grams**

On the obverse lions and castles of the coat of arms have been transposed. Initials P and T are detailed and separated by the Greek cross. Numerals corresponding to the future king Phillip IV's ordinal IIII are evident, in particular the first small line, which was later added between the king's name and the pre-existing ordinal III. These details enable us to think that an initial die from 1621 bearing the sign III was later modified to include the fourth I and match the king's name Phillip IV. A 6 and Z corresponding to the year 1621 can be seen on the blurry reverse. Regardless of the lack of clarity, this coin corresponds to 1621 because greyhound-looking lions did not exist in 1620. Castles and lions are switched.

The following summary includes types of castles and lions from 1615 to 1629, when castle design of the Sevillian type is no longer favored:

- 1) Assayers Q - M - PARL and T (first year): Drawings are homogeneous from 1615 to 1618.
- 2) Assayers T (1618-1627) and P (1622-1624) slightly modified the castle design and applied new ones for the lions, alternating them indiscriminately every year. At times they used the first-period design (1) and sometimes the new one (2).
- 3) Since 1626, P followed the same outline, which was later used by T and P in 1629 (with an interruption in 1628).
- 4) In 1628 both assayers used new lion designs, with no logical explanation.

1)	coin 144			coin 132
<hr/>				
2)	coin 155			coin 155
	coin 161			coin 164
<hr/>				
3)	coin 173			coin 173
<hr/>				
4)	coin 176			coin 180



## PHILLIP IV 1622-1666 (minting period)

Phillip IV became a monarch at the age of sixteen, facing a task beyond his ability given his young age. To make matters worse, incompetent and corrupt advisers surrounded him. In the shadows of Charles V, the great architect of world politics, and Phillip II's perfectionism, the third Phillip could only survive his inability to govern thanks to the heritage received. By the time Phillip IV began his reign, Spain was showing signs of weariness, which should have sparked renewed energy to anticipate the changing times ahead, in which the West would see its social, economic and political basis altered.

Phillip IV could not meet the challenge.

He was unable to consolidate Spain's internal structure. He thought to have found the solution by embarking upon long, costly and futile wars, which resulted in the loss of the Netherlands, Portugal, its influence on Italy and a decline of Spain's massive maritime control.

Nevertheless, decline did not prevent Spain from maintaining its protagonist role within the European political arena. Precious metals from Spain's apparently inexhaustible mines still flooded the world. The "eight" real was one of the basic coins used for international transactions. It became the standard for Western monetary systems, indispensable for the growing economies, for commercial exchanges and for supporting the constant demand for currency needed to finance the ongoing and very expensive wars. Potosi's and Mexico's magical depths continued to deliver generously and steadily to the demands of human greed.

We will continue with an analysis of assayers' performances operating during the reign of Phillip IV: Palencia, Tapia, Treviño, Arellano, Velázquez, Zambrano, Roas and Ergueta.

### ASSAYER MARTÍN DE PALENCIA, 1622-1628

#### INITIAL P

As mentioned above, in 1621 there should have been a stoppage to Tapia's functions as assayer to start Palencia in his duties. Initial P corresponds to assayer Martín de Palencia (formerly attributed to Luis de Peralta) who probably minted his first coin in 1621, although we reiterate, to date no pieces have been found bearing clear enough details to confirm it.

Conflicts between both assayers during that period are known. They were tolerated due to lack of assertiveness from authorities, until Palencia fully assumed his duties as assayer. The circumstances themselves could have led to the double imprints or superimposed initials on period coins, although no pieces dated 1621 (or 1622) under those conditions has been located to date.

Palencia is thought to have remained in his position as assayer for many years, since no other assayers are known for the period. Another reason for this assumption is the difficulty in conclusively confirming issue dates for pieces of that period.

It is known that, in late 1624, the main dam holding back waters used to process the material collapsed. The accident's effects extended well into the following year and, logically, production at the mint suffered.

To add to the natural disaster, a state of anarchy reigned over Potosi, culminating with the episodes known as the *Guanaco War*, a true civil conflict fed by both ethnic and economic components. One should remember that because of its enormous mineral wealth, the City of Potosi was once one of the most populous cities in the world, concentrating the greedy interest of its citizens, "criollos" born in America to the first European immigrants, Spaniards from various regions such

as Basque, Catalan and Castilian, and naturally the autochthonous indigenous population.

To add to this complex mix, there were also unscrupulous adventurers of all nationalities. Each party contributed to the chaos, which in turn unleashed internal wars, atrocities and massacres of all kinds, only brought under control by the Spanish authorities several decades later. All these events have a major influence on the poor production of Potosi.

Coins with initial P are rudimentary; the design is confusing, often bearing double or triple striking.

During his six or seven years as assayer, Palencia became one of the most controversial officials, in part given the difficulty in determining time limits to his production. Denominations on all his coins are in Roman numerals and the circle above the VIII is fairly large. Texts use the letter Y, and the transposition of lions and castles on the reverse of the coins is almost constant.

Some pieces dating to P's production years have lions resembling greyhound dogs, while other have rampant lions, with sharp and elegant lines. These variations do not offer any clues as to which variant came first, hindering any effort to establish a chronology based on similarities from one year to the next. We tend to believe that Palencia used two kinds of dies interchangeably for the reverse, with no major concerns as to identifying the year of production. We consider Palencia to have begun coinage in 1622.

### 1622 P

On coins from 1622, initials on the obverse and the year's numerals on the reverse are easy to read. Between the mint's P and the assayer's P there is either a blade-shaped marking or a Greek cross.



### **N° 162. 27 grams**

**The irregular thickness of the blank defies any effort to properly mint this coin, although evidence of the fundamental details can still be observed. Obverse: the blade-like marking separating both initials is evident, as is the mint's P. The second initial could appear to be a T or a P over T (similar cases create confusion in the attribution of dates and assayers). We believe this case to be a P, slightly compressed on the top, with superimposed metal, which creates the impression that a small bar was placed over the letter P. Reverse: castles and lions have been transposed; lions are robust, rampant and well defined. The end of the text clearly reads REX 1622 (omitting the word ANO or "year"), which, due to a double strike, is legible in two fields, the lower being clearer.**



**N° 163. 27.3 grams**

**Obverse:** between both initials P there is a Greek cross. Details of the crowned shield are clear, the text HISPANIARUM is partially legible (spelled with a Latin I). **Reverse:** castles and lions are transposed; lions are rampant; the date's three numerals are very clear (6ZZ) indicating the year 1622.

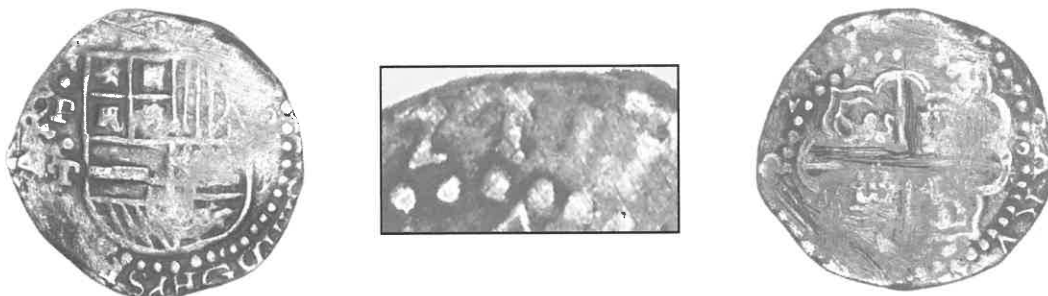


**N° 164. 27.1 grams**

**Obverse:** both initials P are clear and clearly separated by a thick superimposed cross. HISPANIARUM is spelled with Y and double P, both retrograded but the second one minted over a normal one, yielding the image of an H. Castles and lions on the Heraldic shield are transposed. **Reverse:** castles and lions are intertwined; lion once again resembles a greyhound; the date reads 16ZZ even though Z and 6 are slightly superimposed.

### 1623 P

On the very few coins dated 1623 there is a very strange aspect: part of the date was written with Arabic numerals and part with Roman numerals, producing as a result something like 16ZIII. The two Ps are separated by a period.



**N° 165. 26.4 grams**

This coin was a result of the salvage of a shipwreck, whose recovery revealed so many unknowns to the understanding of Spanish cobs. **Obverse:** the two Ps are separated by a dot. The assayer and mint P's have special characteristics (an anomaly which also appears in the years with Tapia's initial). The upper section of the P, rather than having just one lobe to the right, has two, one opposite the other. The inferior part of the lobe is unfinished

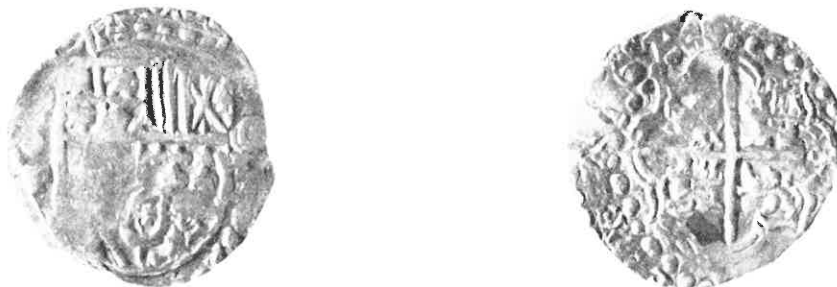
as well as the P of the mint's initial. Nice shield of arms with Hispaniarum with a Greek Y. Obverse: very clear with transposed castles and lions (the latter resembling greyhounds). The typical inscription 6ZIII (1623) certifies the date.



N° 166. 27.1 grams

The obverse shows the clear P of the mint and the heavy Greek cross. The superimposed pearls of the inner border—and part of the legend PANYA followed by a second group of letters NYA that reveal the double striking—lead us to observe the presence of a P, placed within the space for the assayer's initial and below the Greek cross, which bears the two small lobes of the P engraved opposite each other. On the reverse, lions are different from those on pieces from the earlier year 1621: they are definitely rampant, thick, and with their legs placed correctly; castles and lions are transposed. Symbols 6 Z 1 for the date are very clear. After these symbols, there is a large space prior to the location assigned to the rose separating the writing, which lacks any signs of inscription. The space is just long enough to allow the placement of two small bars, thus completing the date to the numeral 6Z111 as on the previous piece.

1624 P



N° 167.

A deficient coin. Both P's are present on the obverse. On the reverse 1624 can be clearly read. Lions and castles are transposed. Lions are deformed and appear to be crouched down, although not as much as on previous pieces.

*Calbeto: piece No. 993.*

**1625 P**

As mentioned before, late in 1624 the dam holding the lake whose waters were used to process Potosi's minerals broke down. As a result, producing *paste* became difficult.

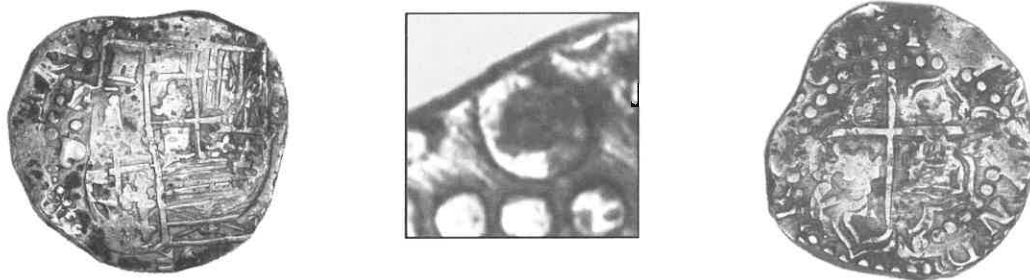
Some experts accept the existence of 1625 coins, although to this day, there is not clear evidence. One could infer that until the dam was rebuilt, Potosi did not produce cobs of 8 reales, or that production was so meager that no coins survived over the years.

**1626 P**

In the year 1626 coins with a P appeared once again, minted similarly to previous ones.

**N° 168. 27.2 grams**

A coin salvaged from a wreck, esthetically less elegant due to cleaning after its rescue. Both P's on the obverse are evident. The numeral VIII shows a large circle or dot above it. On the reverse castles and passant lions are transposed. The date, although weak in outline, is very clear: an O for "Ano" followed by a 1, a 6, a 2 and another 6. The date ends with a dividing line before the letter E of "Et Indiarum"

**N° 169. 27.2 grams**

Coin partially covered in rust. Minting is confusing: the right side of the coat of arms is transversally struck twice at the base, erasing its original elements. Only the two P's are raised and are separated by a period. Reverse: lions and castles are placed correctly, rather than suffering from the transposition that was habitual with this assayer. Lions resemble elongated greyhounds. A large part of the date is erased, but the REX's R is noticeable, as are the spaces needed to complete the date right up to the separating cross (omitting the word ANO). Of the date's numerals placed before the separating cross and the letters ET, only the lower part of a bulging 6 and a cropped upper section are visible. This mark can only be a 6 because the last number corresponding to any of Palencia's years could not be a 0 and an 8 would be narrower.

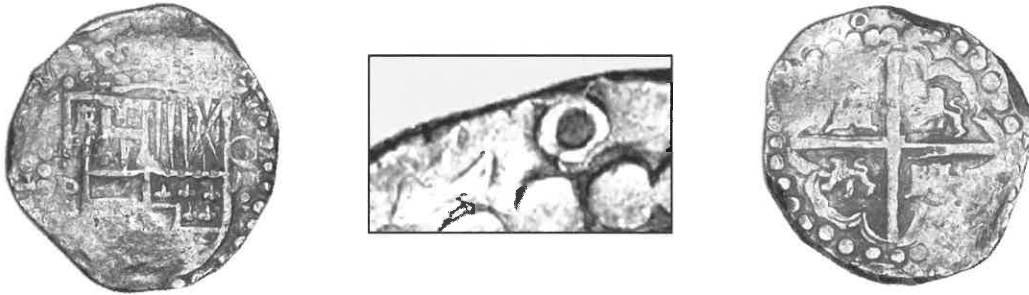
Let's bear in mind that in 1626 Ballesteros el Mozo lost his assayer license. Juan Martel de León, who remained in his post until 1633, filled the position. Martel de León carried out his duties (without proper royal authorization) through his *lieutenants* or deputies, because in reality he was not a professional but rather an entrepreneurial character who picked up the trade to seek economic interests. He should bear part of the responsibility for the lack of discipline, which overtook the Potosi Mint during that period.

### 1627 P

Some studies accept the existence of coins by assayer P dated 1627. We do not agree with this assessment. On the contrary, we maintain that only Tapia minted coins that year.

### 1628 P

Once again, Palencia and Tapia minted coins together during this year. We admit we lack accurate data, but in our opinion Palencia was the first to mint followed by Tapia.



### **N° 170. 27 grams**

**This coin shows signs of having been buried. Despite its blurry design, essential characteristics are evident. Obverse: the two P's separated by a dot are located on the edge of the shield, thus losing the outline of the first. Reverse: castles and lions occupy their expected places; lions are passant, their design elegant and very different from the image of a greyhound dog. The legend is unreadable, but the 2 and the 8 (the latter with a small circle at the base of the numeral and part of the outline of the upper part) allow us to catalog the coin, unquestionably, as 1628.**

**1629 P****N° 171.**

In Ponterio's auction number 133 on January 15, 2005, a piece dated 1629 with assayer P was offered and sold. Unquestionably, this piece belongs to Palencia, given the presence of initial P crowned by a dividing dot, on the obverse. On the reverse, the date's numerals 1, 6 and Z are clear. The last numeral, resembling a 9, is questionable, due to double striking. The same number cannot be a zero but could be the upper section of an 8, whose lower part is blurry. This would be the first coin with initial P dated 1629 that we know of.

The quantity of coins minted by P is not abundant, nor was it meager. The difficulty comes in obtaining coins where both the assayer's initials and the issue date are legible, unless the last numeral representing the issue date is clearly visible, which would be enough evidence, given the fact that Palencia only produced pieces during the 1620s.

As doubts regarding the 1629 piece remain (its existence already mentioned by some experts), we consider that, at the present time, coins bearing the assayer initial P with issue dates 1622, 1623, 1624, 1626 and 1628 are pieces that can be catalogued with no error.

**N° 172. 26.8 grams**

We include this coin only to exemplify the carelessness prevailing over the period's work. Of all the details that should be present on the coin, only the two P's are legible. The rest of the piece, both obverse and reverse, is made up of chaotic strokes.

**ASSAYER JUAN XIMÉNEZ DE TAPIA, SECOND PERIOD, 1627-1639.**

In 1627 Tapia resumed his duties as assayer for a second term, ending in 1639. During this period by T, coins reveal a more meticulous preparation of dies and care in the minting process. Every year of production includes design variations but the general appearance of the coins remains constant.

**1627 T**

Tapia minted coins towards the end of 1627. Lions on the reverse resemble greyhound dogs. Castles' features are similar to previous coins by P. Coins of this particular year show carelessness.

**N° 173. 26.1 grams**

A damaged coin, probably because it was salvaged from a wreck, which would also explain its lower weight. The obverse is the most affected, although a thin T can be observed below a separation period and above it the mint's P. On the reverse, lions and castles are transposed. To the left, the year ANO 16 is legible. After the 6 the numeral is interrupted and a second imprint clearly reveals a 7. Characteristics of lions and castles confirm it could neither be 1617 nor 1637.

**N° 174. 26.8 grams**

The T on the obverse is clear, a cross separating both initials. There is a clear transposition of Castile and Leon with Catalonia, Aragon and Sicily in the upper half of the shield. Reverse: lion and castles are transposed; the numerals 627 are clearly legible, although the 7 could have undergone some retooling.





**N° 175. 26.5 grams**

To emphasize the existence of a 1627 coin by T, the next photographic reproduction involves a piece whose obverse depicts a P and T separated by a period. Lions on the reverse resemble greyhounds. The text (slightly displaced clockwise) shows the word ANO and the base of a Z and last numeral 7.

**S.B.C.: lot No. 652.**

#### **1628 T**

This year's coins repeat the previous year's characteristics, but are minted clearly on both sides. Lions on the reverse continue to be elongated, although they begin to show some retraction as a result of cleaner lines. Castles also undergo the changes, becoming larger and more detailed.

Considering that P also worked during 1628, one should ask if both assayers worked simultaneously. If they did not, how did they alternate their corresponding duties at the mint? Unfortunately there are no sources to clarify this question. Our opinion is that Palencia minted coins during the first months and was substituted by Tapia. To support this assertion, we present a piece where a T over a P is clearly evident.



**N° 176. 27.2 grams**

On the obverse the superimposed assayer initial is evident. At the base there is an unintelligible marking. The P is engraved and with no further substantial modifications a T is applied over it. The remarkable element of the T is the upper left branch of the letter, curved downwards, a detail unknown on coins bearing a P alone. This coin is otherwise typical for its period. Lions and castles on the reverse are placed in their proper locations. The lions' features are stylized and passant. With some effort one can observe the lower end of an 8 in the position of the missing legend, which enables its placement in the year 1628.

**N° 177. 27.2 grams**

A coin formerly of the Sellschopp collection. Perforated at 12 o'clock. Obverse: initials P and T and a disproportionate circle over the Roman VIII are visible. Reverse: castles and lions (greyhounds) are placed in the correct positions. Numerals Z8 are very clear, thus identifying the year 1628.

**N° 178. 26.8 grams**

This is a good coin. Both initials on the obverse are clear. The minting of the shield is very careful on the obverse. Lions and castles are transposed and the latter are no longer greyhound-like. The word INDIARUM is spelled with a Y. The date is scarcely visible. Half of the numerals 6 and 2 can be identified, as is the curl of the 8, which cannot be mistaken with a 6 or 0 given its larger size. Consequently, these numbers indicate the year 1628.

**1629 T**

Although no bibliographic endorsement is available, we are certain that during the year 1629 there was a significant change in design. The Roman VIII became an Arabic 8, something rarely seen before. The change must have taken place about halfway through the year, since both kinds are frequent. Naturally, coins bearing a Roman VIII correspond to the first half of the year, ending a long tradition. The second half of the year represents the start of a new appearance, which carried on in the years that followed. The obverse includes three small dots: one over the P, a central one as a divider and a third one under the T. The initial T is thin and elongated. Lions on the reverse are always passant and solid, while castles varied as the year progressed.



**N° 179. 27.2 grams**

This coin could be considered as a nice and clear coin. It includes all three small dots among the initials P and T. The Roman VIII is very visible, with a thicker upper circle. Philippus is spelled with only one P and a Latin I. On the reverse, all the numbers of the year 1629 appear splendidly and legibly. Lions are as described above. Castles are also similar to those from 1628.



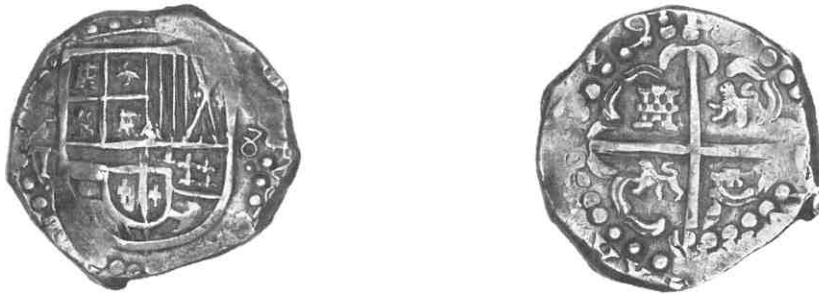
**N° 180. 27.2 grams**

On the obverse we observe the T for Tapia, the monarch's IIII and the Roman VIII. On the reverse, the terminal portion of the 9 is only partially visible, but is enough to date the coin to 1629. What truly confirms the year are the characteristics similar to the previous coin, still maintaining the Roman VIII.



**N° 181. 27 grams**

The case is the same for this coin with initial T. On the reverse, the numeral 62 is perfectly legible, and it was clearly part of Tapia's production during the 1620s. On the obverse we can appreciate the initial substitution of an Arabic 8 for the Roman VIII. These three elements confirm that 1629 was the beginning of a new design for the 8, replacing the Roman numeral that had been used for decades. No other detail differs from previous coins of the same period.



**N° 182. 27.5 grams**

A beautiful coin, bearing on the obverse the three initials separated by three small dots. The Arabic 8 is sharp and flanked by two small dots. The 8's upper section is partially open to the left. The reverse undoubtedly reads Z9. During 1629 other new elements appeared: while lions are identical to other pieces of that year, castles acquired an elegant chessboard appearance, which was used for the next twenty years, with almost no exceptions.



**N° 183. 26.6 grams**

This last piece from 1629 is included to highlight the constant changes undergone in the design that year. On the obverse, initials are very clear while the Arabic numeral eight referring to the value is barely visible. On the reverse, castles in the shape of chessboards and passant lions are typical. With some difficulty, one can see the base of the 6, the Z and the final 9 corresponding to the year's numerals. The most interesting element on the reverse is a change in design that abandons the former large pearls for good and substitutes them with a cord of little ones.

**1630 T**

It appears that this year brought an improved dedication to the manufacture of coins, to the point of asserting that these pieces represent the most carefully crafted of all the dated coins bearing a crowned shield. The available pieces are more abundant, perhaps because the care placed upon their manufacture allowed for a better appreciation of details. As of this date, the inner borders had smaller dots. Other details did not undergo changes, except for the lions, which are a bit more upright.



**N° 184. 26.5 grams**

A slightly damaged coin, as a result of being buried on land. Both initials on the obverse are still apart and placed within three small dots. To the right is the inscription Phillipus III and the Arabic 8 surrounded by two small dots. The reverse clearly reads ANO 1630. Castles are the same as in the previous year. Lions are rampant, though they provide an unhappy image. The legend ends with a St. Andrew's cross.



**N° 185. 27 grams**

A beautiful coin formerly of the Burzio collection. The obverse presents a peculiarity not seen on any other cob, which could be catalogued as a temporary anomaly (1630 and 1631). Above the mint's initial and below the assayer's, an X (or St. Andrew's cross) is used as the separating element, providing the design with a peculiar appearance. The 8 is also contained by two X's. To the left, the word RUM is evident representing the last letters of HISPANIARUM. Despite the double striking on the right side of the shield, the general design is impeccable. The reverse presents the complete date, 630. Castles and lions are like on the previous coin, but showing more careful and clear minting.

**1631 T**

The same type of 1630 coins is maintained. The year includes pieces where initials and numerals are within or separated by dots or St. Andrew's cross. Castles resemble chessboards. Lions are passant.



**N° 186. 27.3 grams**

Formerly of the Sellschopp collection. A beautiful piece. Obverse shows part of the legend. The Mint's initial is not legible, but the assayer's T is. Both initials are separated and circumscribed by dots, while the denomination to the right has the St. Andrew's cross as on the previous coin. The reverse is well centered and the date, 631, is evident, ending with a St. Andrew's cross.

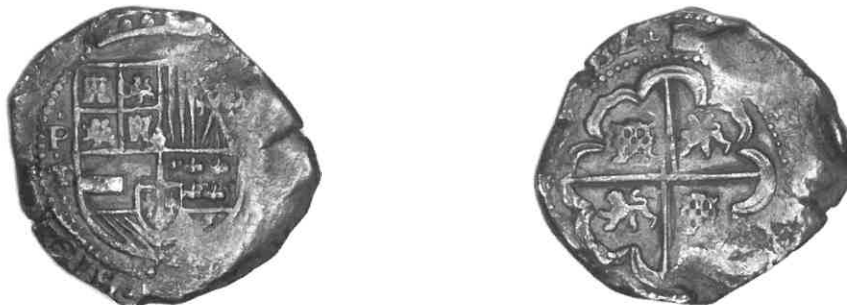
### 1632 T

No changes with respect to the previous coins, but the alternative of a St. Andrews cross as a separating element disappears. Lions on the reverse are passant.



**N° 187. 27.3 grams**

Initials on the obverse are not legible, although there was probably a T because no other assayer but Tapia minted during that period. The monarch's name is positioned to the right. On the reverse the symbols 3Z representing the year 1632's last numerals are clear. No major changes affected the castles. Lions are passant.



**N° 188. 27 grams**

Nice coin. On the obverse the two initials with the dividing dots are clear. On the reverse it's possible to read the two last numbers (32) of the year 1632. There are no changes in the castles or lions.

**1633 T**

No important changes take place this year. Previous year's guidelines repeat.

**N° 189. 26.9 grams**

A coin formerly of the Burzio collection. Obverse is minted with great care, the result of a fine and delicate engraving incision. The T is slightly more elongated than on previous cobs. The monarch's name is positioned to the right. The reverse is untidy. No changes in the castles or lions are present. The year's last two numerals are clear.

**N° 190. 27.4 grams**

Another beautiful piece. On the obverse the initials are very clear, separated and contained by dots. On the reverse, the date 1633 is evident; there are no changes in castles, while lions are once again rampant.

**1634 T**

This year was important, because Juan de Figueroa acquired by tender the position of sole assayer of Potosi mint, which granted him the right to designate *lieutenants*. Figueroa, while pursuing other interests, neglected his responsibilities as assayer and left the work to third parties, a fact reflected in the poor minting of cobs. He respected the contractual terms of the Royal Warrant but abused his right to designate *lieutenants*, whom he arbitrarily assigned and removed from their job. In 1640 he transferred the title to Ramírez de Arellano, who was a major player in the 1647 trial.

The disarray created by Figueroa caused an alternating order of assayers, some of whom would be absent one year only to reappear at a later date, and finally the simultaneous activity of assayers during the same year. The chaos conspired against the quality of cobs and facilitated corruption and fraud against the Crown's interests. Understandably, this situation had to end in court; proceedings took place mid-century, forcing Figueroa to resign his rights as assayer in exchange for the remission of a fine of 100,000 pesos in pieces of 8 reales applied by the judicial authorities.



**N° 191. 25.5 grams**

Coin salvaged from a shipwreck. As a result, corrosion is present and weight reduced. On the obverse initials and monarch's name to the right are clear. Reverse: castles are standard for the period and lions are rampant; parts of the text are legible. Numbers 3 and 4 are large and clear. The edges of number 4 are sharp when compared to other numbers or letters.



**N° 192. 27.2 grams**

A poor piece. Although on the obverse the assayer's initial is difficult to identify, it is enough to assign this cob to Tapia. The reverse is elegant. Castles and lions, as well as the numbers 6 3 4 are clearly visible. On this coin, the edges of number 4 are also sharp, presenting additional differing features from the previous piece, which would support the notion of a double imprint of the last digit over a previous die.



**N° 193. 27 grams**

This piece looks like a Royal Coin. With a hole at 6 o'clock. There is not much to be said about the obverse. On the reverse, the arrow's border is missing, but the base of the numbers 1 and 6, part of the 3 and the sharp borders of the 4, typical of this year are visible.



**1635 T**

No changes took place this year.

**N° 194. 26.9 grams**

This is an elegant piece, although the varying thickness of the planchet results in portions of the coin without relief. On the obverse the T is almost concealed by its proximity to an overly thick edge, which restricted minting. Due to the remaining space and the fact that no other assayer coined in 1635, we assign this piece to Tapia. Lions on the reverse have stylized design similar to those on coins dated 1634. Castles resemble chessboards. The last two digits are indisputable (35).

**N° 195. 26 grams**

A coin formerly of the Bostonian Collection. This piece is almost in the same condition as the previous one. The T is not visible without a magnifying lens. The reverse is similar to the previous one, with visible end-digits 3 and 5, and partial visibility of the 6 to form the year 1635.

**1636 T**

No design changes took place in this year either. Pearls of the inner border are still small.



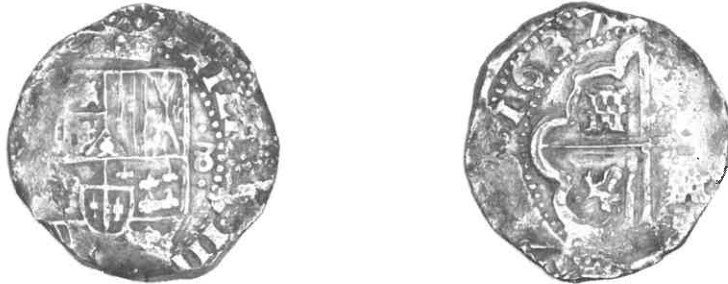
**N° 196.**

The obverse is the same as in the previous year, with an evident P and T. Reverse: castles and lions are identical to the previous coin. Date is evident and reads 636.

*Ponterio: lot No. 72.*

### 1637 T

During 1637, simultaneously or alternatively, Treviño began production. In F & D Sedwick's book «The Practical Book of Cobs», Tapia's period finishes in 1636. Indeed, the uncertainty in assigning pieces to Tapia during 1637 and 1638 comes from the difficulty of certifying the assayer's initial. But the mystery then falls on the Royal coins bearing a clear T and dated 1639.



**N° 197. 27,1 grams**

This beautiful piece bears a clear and completely legible 1637. Designs of the Castile and Leon shield are identical to cobs dated 1636 and not substantially different from Treviño's cobs. On the obverse, initials are not legible, though we are inclined to assign this piece to assayer T.



**N° 198.**

This photograph illustrates another piece dated 1637 with the same characteristics as those previously shown. On the reverse the end of the text shows the numbers 3 and 7 (the later one severed at the top). The assayer's initial appears to be a T, although with no certainty. Sellschopp assigned this piece to 1637 T.

*Sellschopp: piece No. 485.*

**1638 T**

This year's pieces can also be mistaken for those from Treviño, because their features are very similar.

**N° 199. 27 grams**

The mint's initial P is evident. Below there is a central separating period and an initial (apparently blurry) that could be a T. On the reverse the 6 and the 3 are clear, and though the 8 is less evident, the smaller lower bubble and part of the upper circle confirm it. The only other number that could match these features would be a 6, but the number 6 has a broader base as on the piece dated 1636.

**N° 200. 26.2 grams**

On the obverse the mint's initial is illegible, as is the assayer's, although some strokes remain of the latter, potentially enabling its identification as a T. The type of spread-out planchet corresponds more to Tapia than Treviño. The reverse is sharp, with a very clear number 38.

**1639 T**

No pieces corresponding to ordinary currency or lower denomination are known bearing initial T and dated 1639. In lieu of this absence we reproduce a Royal Coin.

**N° 201.**

Royal Coin dated 1639, featured toward the end of Dr. E. A. Sellschopp's book: clear, bearing an indisputable T and issue date. Perhaps T only minted Royal Coins without any involvement in the normal and massive production of regular currency pieces. Sellschopp: *piece No. 554.*

We consider 1639 to be the final year of production for Tapia, whose duties were interrupted for no apparent reason, only to begin again in 1644. We reiterate that sporadic minting by Tapia during his years of absence is possible and should not be excluded.

**ASSAYER PEDRO TREVIÑO, 1637-1647****INITIAL TR**

Pedro Treviño's initials TR are different from other monograms with those same letters because of the particular form in which they are articulated: a robust R intertwined with a T, emphasized by a wing on the upper left. In reality the resulting solid core lacks elegance.

In our opinion Treviño began minting his normal production in 1637. Some specimens bearing this monogram and dated 1634, 1635 and 1636 are reported to exist, although these pieces lack information that can confirm Treviño's craftsmanship, namely a clear date and assayer's initials. Coins of this period correspond to Tapia, not to Treviño, although one should not rule out Treviño's authorship of some pieces, because prior to occupying the position of official assayer he worked in various hierarchies within the Mint.

The appearance of TR pieces does not differ greatly from Tapia's. The size of the small inner border pearls is identical to those found on Tapia's cobs.

**N° 202. 26.7 grams**

An undated coin from 1637-1640. This coin is reproduced to exemplify the quality achieved by the Potosi mint during that period. The obverse is impeccable: Treviño's monogram is very clear; dots are used for separations; the Hapsburg shield is well designed. On the reverse, castle and lion designs are exemplary. Consequently it is a shame the date space is missing.

**1637 TR**

This year's characteristics were described above.

**N° 203. 27.5 grams**

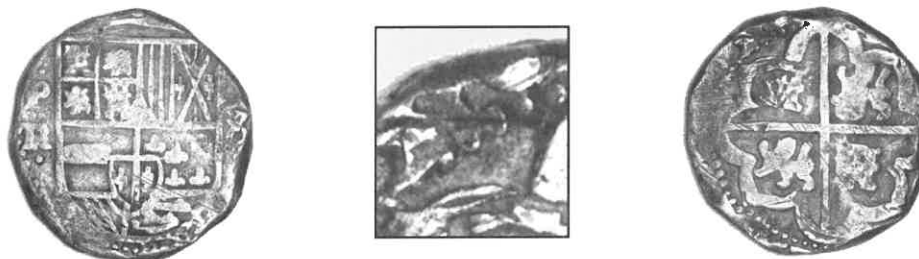
**Obverse:** both initials are separated by dots; general appearance is neglected. **Reverse:** few details on the castles and lions; a remarkable feature includes the number 7 at the end of the date, which confirms the coin's date to be 1637. Additionally, the dated Royal cob, bearing his initials, from the publication "Los Redondos" by J.L. Lázaro, coin # 96, can further verify the application of Treviño's monogram in 1637.

**1638 TR**

No major changes affected pieces in this year.

**N° 204. 26.9 grams**

A particularly rare coin for its time. Both initials are very evident, as are the separating periods, the date's numeral 8 and the Heraldic shield. The reverse is more damaged, although both numbers 3 and 8 are evident despite double-striking.

**N° 205. 27 grams**

The coin's disk blank is smaller due to a thicker blank planchet. On the obverse, all of the piece's details are evident but somewhat blurry. The reverse is modest; a properly placed number 3 and the remnants of an 8 corresponding to 1638 can be distinguished with some difficulty (the last numeral could not be a 6 or a 0 because those years saw no production of cobs with initials TR).

**1639 TR**

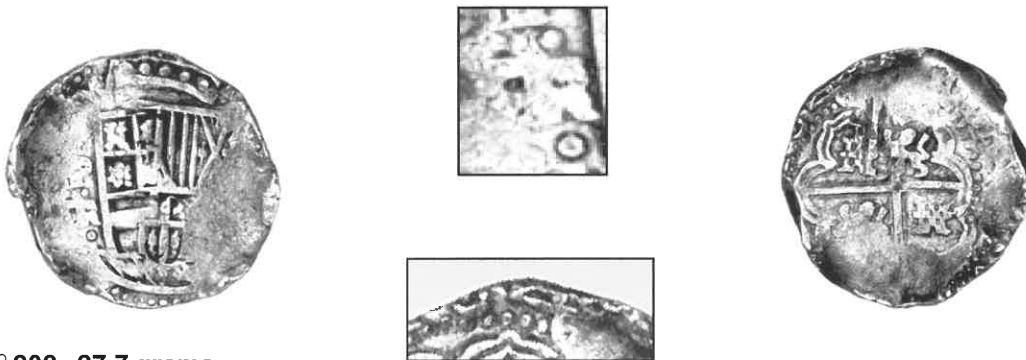
Characteristics of the period remained current.

**N° 206. 26.1 grams**

The partially incomplete strike on this coin is a result of the varying thickness of the planchet. The obverse includes two initials separated by periods. Double-striking is present on the reverse, where only the central shield and last digit 9 stand out before the legend's separating period. These features are enough to identify the year (1639).

**N° 207. 25.1 grams**

This coin is of lesser quality, minted on a thinner blank, which additionally suffered a reduction of weight due to shaving and lateral trimming. On the obverse initials TR are only a guess given the relief occupying the assigned space and the trace of a final R from TR rather than a single T. On the reverse a 3 and 9 are slightly displaced inwards as a result of double-striking, corroborating 1639 as the year of coinage.

**1640 TR****N° 208. 27.7 grams**

Although the quality of the obverse is poor, the mint's P and the assayer's initial are evident. The monogram TR clearly corresponds to Treviño. The reverse, also low in quality, shows the bases of the 1 and 6, plus a full 4. A glimpse of the base of a 0 appears in the place for the last digit. Despite some doubts surrounding the 0 we choose to identify it as such, because the 4 is indisputable and a new assayer begins minting during 1640.

This last piece would confirm that Treviño minted coins in early 1640, an assertion further supported by a known Royal cob by the same assayer, identified as #555 in the book by Dr. E. A. Sellschopp.

**NEW ASSAYER (?) FELIPE RAMÍREZ DE ARELLANO, 1640-1647****INITIALS FR**

In 1640 Figueroa subcontracted Felipe Ramírez de Arellano as an assayer. Arellano's direct involvement at the mint cannot be verified with certainty and neither can the engraving of his own initials on the die. Nonetheless, during a period of 8 years, from 1640 to 1647, the cobs' monogram did not resemble Treviño's. The new initials remained in use until 1643, undergoing only slight modification from 1644 to 1647.

During the first 4 years of this new monogram, a horizontal line was added over the central core of the R. This line no longer bore the former left arm representing Treviño's T, but rather added length to the right arm, curving it downward, thus suggesting a new monogram FR.

We believe the new monogram FR could correspond to the initials of first and last name of Felipe Ramírez. No supporting documentation is available, although most likely Treviño operated and engraved his initials TR in early 1640, while the monogram FR was applied for the remainder of the year. It would be unlikely for the same assayer to utilize two different monograms within the same period. Moreover, both assayers were later summoned to Spain to account for production at the Potosi mint.

Ramírez de Arellano would become one of the main figures responsible for wrongdoing in the proceedings of 1647 initiated against officials of the Potosi mint. The trial coincided with the end of coinage by FR. During the second period of production, the left arm of the monogram's upper line reappeared and the right arm shrank. This could mean a return to Treviño's initials TR, although other design features are different.

With the intent of establishing a comparison between Treviño's monogram and the other two, which we consider the work of Ramírez de Arellano, we reproduce all three sets of initials (information gathered from coins within this text).

Treviño  
coin 206



Ramírez I  
coin 216



Ramírez II  
coin 219



### 1640 FR

Thickness for these pieces is more uniform, providing a more regular and extensive circular shape. There were no substantial design changes this year, except for the lions on the reverse, which remained rampant as in the former design but added abundant fur to both body and legs.



### **N° 209. 27.8 grams**

**Obverse:** initials are partially mutilated due to deficient minting. In spite of that, in the upper right section of the monogram the horizontal line ending in a downward curve is evident, as in FR, and does not include a long left arm. On the reverse numbers 4 and 0 are clearly visible, affording the piece to be dated 1640. Other design details correspond to the period. Royal coin #101 in the publication *Los Redondos* by J.L. Lázaro gives testimony to the concurrent presence on a cob of the date 1640 and initials FR.



**N° 210. 25.5 grams**

To confirm the year we reproduce a photograph of a piece bearing the clear monogram FR on the obverse and the numbers 4 and 0 on the reverse (year 1640). The rest of the design is typical for its period. The coin is pierced at 3 o'clock.

*S.B.C.: lot No. 675.*

**1641 FR**

The design and its details did not change from the prior year.



**N° 211. 26.9 grams**

In the obverse, the coat of arms is clear as well as the mint's initial. The monogram FR is rather blurry, but no other assayer existed that year. Reverse: lions and castles are transposed and the date is very clear.

**1642 FR**

Characteristics of previous years did not change.



**N° 212. 25.5 grams**

The obverse is insignificant, although monogram FR is evident. On the reverse, numbers 4 and 2 are clear (the latter represented by a smaller Z as commonly done at the time).



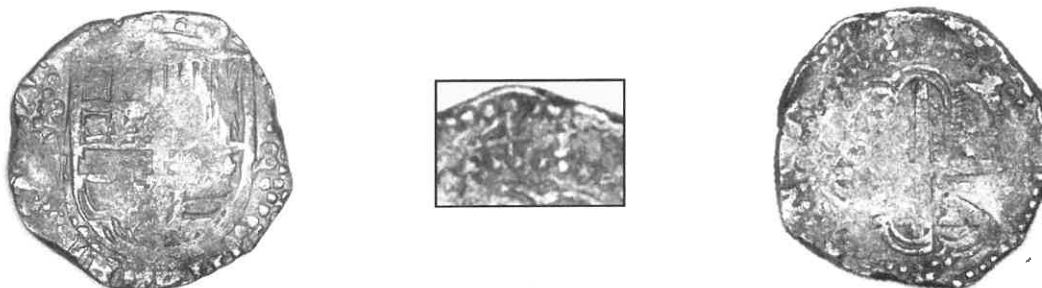


**N° 213. 27 grams**

This piece's obverse is also in poor condition, although the monogram's F is clearly evident. On the reverse, the second-to-last numeral 4 is also clearly legible, while the number 2 (still minted as a Z) only displays the horizontal-line base.

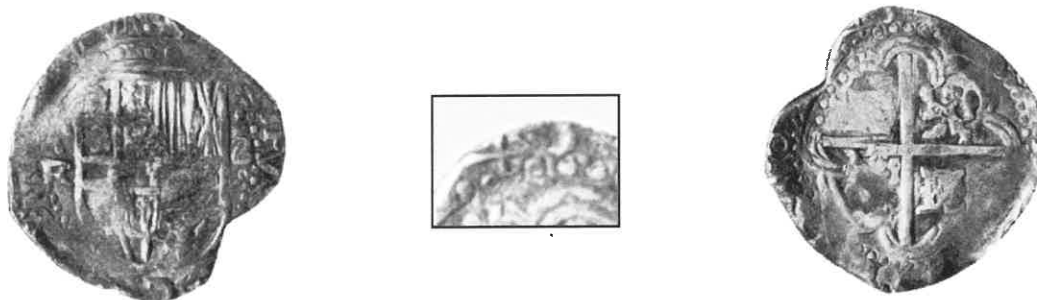
**1643 FR**

No changes were observed for this year's design either.



**N° 214. 26.9 grams**

The obverse is worn out and the monogram to the right of the lower portion of the R can only be suspected. The damaged reverse reveals a 4 with the customary sharp edges of this period and a 3 indicating the year's final digit (1643).



**N° 215.**

Photograph of a piece from Sellschopp with monogram FR on the obverse. The reverse partially reads the numbers 4 and 3. This last digit is split into two halves, a surprising situation for Sellschopp, who questioned whether it's a 3 or a 5. We clearly view it as a three.

*Sellschopp: piece No. 496.*



**N° 216. 25.1 grams**

The reproduction of this coin is intended to alert the reader to one of several non-contemporaneous alterations carried out on cobs to swindle the collector (an event which happened to us). The FR is clear on the obverse. The reverse bears a reasonable appearance, but there is clear evidence of a premeditated addition of copper alloy in the area of the date, which presents the engraved numerals 4 and 3 in an atypical style for the period. A dark patina originally hid the adulterated digits.

**1644 FR (?)**

While general features remained similar to previous years, in 1644 a slight modification to the assayer's monogram appeared. It could have meant a simple design readjustment of Ramirez de Arellano's initials, or the restoration of Treviño as assayer using a new monogram.



**N° 217. 27.5 grams**

A very beautiful coin formerly of the Sellschopp collection, bearing a very visible heraldic shield and initials on the obverse. On the reverse both 4's pertaining to 1644 are unmistakable, as are the detailed castles and lions.

**1645 FR (?)**

No changes are observed.

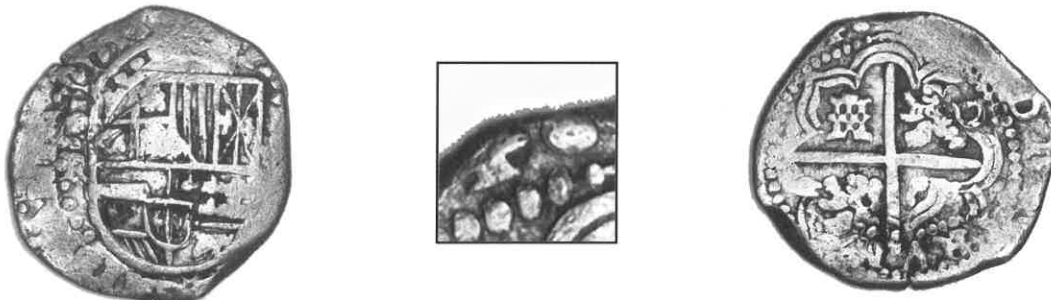


**N° 218. 27.1 grams**

On the obverse, the assayer's initials are blurry but the FR monogram's upper right lobe is evident. On the reverse, numbers 6 4 5 are clear. Number five is rounder in shape than the digit 5 present on concurrent 1645 cobs by assayer Tapia.

**1646 FR (?)**

Cobs in 1646 bore the same characteristics as the previous coins, though we would like to point out that, in spite of FR (?) minting until 1647, the initial V for Gerónimo Velázquez appeared during 1646.

**N° 219. 25.8 grams**

A lighter coin due to the loss of mineral resulting from cleaning the rust produced by the metal's contact with organic matter. Initials are clear on the obverse. On the reverse, one can distinguish a correctly placed 4 and the base of a 6 trimmed on its upper section, the print of these digits being reduced in size, as was the case for Tapia's numerals during those years. This cob is dated 1646 precisely because during that period initials are smaller in size and because an 8 would require a less stocky digit base than that of the partially visible number on this coin.

**1647 FR (?)**

This year represented the last year of coinage by FR before authorities sent from Spain began the inspection, which concluded in the penal trials of 1647 and the involvement of Felipe Ramirez de Arellano.

**N° 220.**

We reference, once again, the work of Dr. E. A. Sellschopp. Although the photograph is not very clear, the obverse of this cob does show the assayer's initials. On the reverse, in this period's typically small print, there are two clear numbers, 4 and 7.

**Sellschopp: piece No. 500.**

We view this to be the end of Arellano's work, although we could not assert with certainty who was ultimately responsible for the craftsmanship of these coins.

**ASSAYER JUAN XIMÉNEZ DE TAPIA, THIRD PERIOD, 1644-1648**

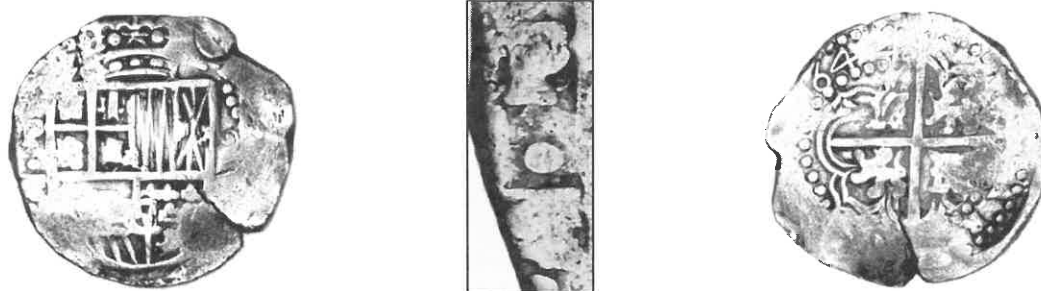
Even though it may seem implausible, initial T reappeared. This initial was most likely Tapia's, although his disappearance, later reappearance and long tenure at the sought-after Potosi mint may prove disorienting.

On the obverse, the P is smaller in size with respect to previous Tapia coinage. The T is short and stocky, occasionally portraying a deformed image. On the reverse lions are rampant, thick, covered in fur and resemble lions from the FR period. The date's numbers are in small print although the rest of the features do not differ from the design present in FR coins. It would appear that the main element differentiating these coins from FR's is simply a change in initials and the reduced size of the numerals.

**1644 T****N° 221. 27.75 grams**

This coin is so clear that it could very well be considered one of the most beautiful pieces of the period. Obverse: both initials are clearly visible. The same holds on the reverse with numbers 6, 4 and 4 (year 1644). Lions are rampant, with less fur than in following years and slender.

*S.B.C.: lot No. 664.*

**N° 222. 27.7 grams**

On the reverse of this piece, numbers 6 and 4 are clearly visible as is an additional 4 further to the right, slightly displaced downwards. This would indicate the year 1644. The question becomes the assayer's initial. It would appear to be a T over an unidentifiable circular lobe, an indication of a possible second imprint over a preexisting initial. Additionally, the print of this T is rather large, like on Tapia's piece dated 1645.

1645 T**N° 223. 27 grams**

A very nice piece for its time, bearing a clear shield and part of the legend on the obverse. Both initials are evident, separated by three separating periods and a number 8 flanked by two dots. On the reverse the date exhibits double striking where numbers 1 and 6 are displaced inward while numbers 4 and 5 are located more externally to complete the date 1645.

**N° 224. 26.8 grams**

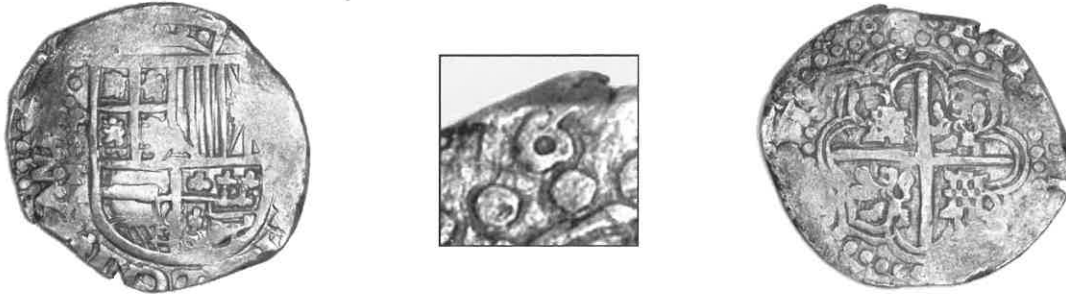
Another beautiful coin from 1645. On the obverse two initials are clearly evident, both contained and separated by periods. Number 8, used to identify the value of the coin, is also contained by dots. On the reverse both the date 645 and the coat of arms are sharp.

**N° 225. 27.6 grams**

On the obverse a clear P and T exhibit the new type of print used for the assayer's initials. On the reverse castles and lions are clearly visible, the latter displaying less fur. Numbers 4 and 5 are evident (year 1645).

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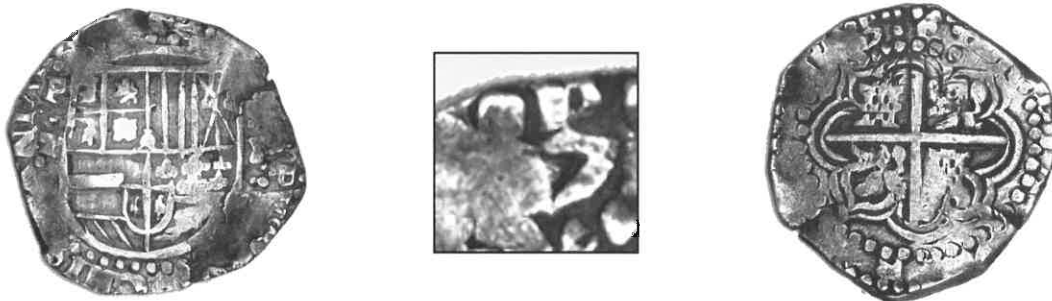
1646 T



**N° 226. 27.2 grams**

**On the obverse initials (typical of the period) are reduced in size and separated by periods; the heraldic shield is clearly visible. The reverse includes the castles and lions with abundant fur. Numbers 1 and 6 are blurry, while the last two digits are a clear 4 and 6, indicating the year 1646.**

1647 T



**N° 227. 25.9 grams**

**On this nice coin the initials are clear and reduced in size. The shield's design is sharp. Reverse: castles and lions correspond to the period's characteristics; before the final diacritical mark of the legend one can identify the number 7 (year 1647)**

1648 T

For most experts Tapia's duties ended in 1647, at least in regards to production of ordinary currency. To our understanding, Tapia continued minting during a brief period in 1648, that is, until the investigation for fraud within the Potosi mint intensified. The next piece we describe below is clear evidence confirming Tapia's activities in 1648, as is the existence of another Royal coin bearing that date.



**N° 228.**

**On the obverse an initial T of reduced dimensions is evident. On the reverse, one can identify a 4 and the base of an 8 (which could not be interpreted as a 0, given the larger size of both numerals and assayer initials used in 1640. Neither could it be the base of a 6 because in 1646 FR or TR used print almost as small as that of a 1 real).**

***Ponterio: lot No. 87.***

**ASSAYER GERÓNIMO VELÁZQUEZ, 1646****INITIAL V**

Gerónimo Velázquez's duties as assayer during 1646 were not previously described, so as not to interrupt the description of Tapia's complete production over time.

Curiously, during this year, Velázquez (who already worked at the Potosi mint in other capacities) was permitted to mint cobs with his initial V.

When he began and when he ended his work as assayer are unknown. His operating period was most likely brief, given the scarce number of coins existing today, but it was long enough to engrave his V on Tapia's dies as well as to create new dies bearing only his initial on a blank field.

The lack of available coins could be the result of either a short production period or the smelting of many of the coins produced in 1646 once authorities reduced its value due to low fineness.

What can be confirmed is that three assayers operated during that year using initials FR, T and V.



**N° 229. 26.6 grams**

**Obverse: part of the visible text includes small print initials P and T (the latter represented by its left horizontal arm). A large, double-imprint V can be observed. The image on the reverse is mediocre and the date is not visible.**

**S.B.C.: lot No. 681.**



**N° 230. 24.9 grams**

**Except for the evident initial V, this cob does not differ greatly from others of its period. On the obverse the only change is the use of two small circles to make up the 8 for the coin's value. On the reverse the date is not clearly visible, though a trace of the 4 shows the use of small print. This coin most likely dates to the year 1646 because Velázquez is not known to have minted in any other year.**

















**N° 231. 27.7 grams**

**To provide clearer evidence, we reproduce a piece where both the V and part of the text on the obverse stand out. On the reverse, the year 1646 is clearly visible.**

***S.B.C.: lot No. 683.***

During the last period of the life of the Crowned Shield cob between 1629 and 1652, the castles acquired a design (resulting from alterations to previous ones) that resembled a chessboard. This design change took place by fusing the battlements on the three upper towers to become two empty squares. The compression of the lower battlements turned into three small empty squares, which combined with the existing windows, completed the new castle. No essential changes are observed in castle design during the entire period, until the penal proceedings of 1650-1652.

Lion variations, on the other hand, are remarkable.

T 29 and 32			coin # 182
T 30/ 31			coin # 186 and 185
T 33/ 38 TR 37/ 40			coin # 202
TR 40/ 43 FR? 44/ 46 (47) T 46/48 V 46			coin # 212
Z 47/ 49			coin # 233 and 235
O-E 50/ 52			coins # 246 and 242

These are the basic designs of these 24 years of production, including alternating lineaments, which do not follow any given criteria.

## POTOSI'S GREAT REORGANIZATION PROCESS

### 1647-1652

This chapter briefly interrupts the description of consecutive assayers from the mint to comment on the political and social climate in existence at the time in the city of Potosi.

Earlier we evaluated various events taking place in the metropolis, which marked the nature of the guidelines issued for the colonies. These are particularly important in reference to the Peruvian Viceroyalty, which was one of the richest but farthest provinces from the epicenter of the general activities of the mainland in Europe.

In the early 1500s Lima's port enabled the city to become the viceroyalty's headquarters and to gain the privilege of becoming the most important city in South America, relegating Cuzco, the former Inca capital, to second place.

One could say Potosi arose from nothing, although in reality its rich mountain was ultimately responsible for turning the city into one of the most prosperous colonial centers by the late 1500s-early 1600s. The new city atmosphere of Potosi combined with its wealth and the ability to readily increase it created a favorable climate for abuses and excesses of all kinds, too difficult to control on a permanent basis from distant Lima.

Those in control of the Potosi's economy and the multiple aspects of silver production ultimately also attained the political and social control of the area. The city's life was governed by intertwined alliances amongst groups of people sharing a common origin to a specific region of Spain, against others from different regions of the peninsula. By the end of 1625, tensions existed between the Basques and groups from Estremadura, the Castilians and the Creole. The sporadic and isolated intervention from Lima could do little to overcome the power of the temporarily dominant faction.

Occasionally winners and losers reconciled to profit at the expense of authorities and the Crown. These alliances generated abuses, from declaring a smaller amount of silver than the actual extracted mineral or smuggling metal to avoid payment of the Royal Fifth, to adulterating coins in regards to fineness or weight. The abuses went so far as to substitute entire lots of cobs produced at the mint by an equal number of coins with often only about 40% fineness.

Anomalies in Potosi were detected as early as the 1620s, causing the withdrawal of the Ballesteros "dynasty" from the management of the mint. But these events proved insufficient to halt the excesses that accelerated over the next twenty-five years and corrupted the entire structure.

The chaos was not limited to the colonies and the metropolis, but rather embodied the entire international economy that had based its commercial scaffolding on the colonial Real of 8, and in particular the 8 reales from Potosi. Madrid assumed responsibility for this situation and coming out of a lethargic state sent a commission with full powers in an attempt to restore the credibility of the mint.

This book will not go into the details of the actual events, but rather reference the careful analysis carried out on the subject by Lic. Arnaldo J. Cunietti Ferrando in his book *Cuaderno de numismáticas y ciencias históricas* edited by the Centro Numismático Buenos Aires (Argentina). Neither will we emphasize the initial failed attempts to rectify the system frustrated by the illegitimate associations reigning in Potosi, but rather only summarize the practical results.

The great inquisitor who intervened to provoke a definite change in the system was Francisco de Nestares Marín, who as president enjoyed full powers and executed them energetically while understanding what was at stake.

The first step in Nestares Marín's inquiry was to identify the parties directly and indirectly responsible for punishable acts. As is often the case with human relations, the main protagonists walked away undamaged.

The following is a review of some of the measures implemented by Nestares Marín:

\* He impeached the official assayer Juan de Figueroa, who had previously paid a high price for his title. Figueroa was removed from his position for bad conduct, and despite avoiding a more severe penal sentencing he was mandated to pay 400,000 reales in pieces of 8.

\* He initiated proceedings against mint officials, which concluded in two convictions and deaths at the stake plus several incarcerations. What is remarkable is that those condemned to death were Gerónimo Velázquez, whose initial was stamped on dies dated 1646, and Felipe Ramírez de Arellano, the probable holder of initials FR between 1640 and 1647.

\* He ordered the smelting of cobs with dates prior to 1647, devalued them 50% and removed them from circulation.

\* He maintained assayer Zambrano (who had assumed his post in 1647) until 1649.

\* He then substituted Zambrano with Juan Rodríguez de Roas (or Rodas), who was specifically sent from Spain to operate the mint between 1649 and 1651.

\* He replaced Roas in 1651 with Antonio de Ergueta, who would become assayer in Potosi for many years to come and who returned the Potosi cob to its luster and credibility.

\* He ordered the application of a seal to cobs minted by the last three assayers, diminishing its value by 1/16 of the face value. These events were performed mostly to recover international credibility, since these coins are actually of legal weight and fineness.

We will not include an analysis of the seals and their meaning because it would not be within the scope of this publication.

Following this clarification, we will conclude the chapter by describing coinage by Zambrano, Roas and Ergueta, which in turn is followed by a description of the new image borne by currency in effect between 1652 and 1773.

**ASSAYER PEDRO ZAMBRANO, 1647-1649****INITIAL Z**

Zambrano assumed his position as assayer during Ramírez de Arellano's tenure as official in 1647. During his first year, Zambrano worked together with T and FR. Cobs with initials T, FR (from previous assayers) and Z, dated 1647, were devaluated to half their value, but Zambrano's later pieces dated 1648 and 1649 bore a circulation seal. Therefore, coinage during Zambrano's first year as assayer probably became part of a larger group of banned coins.

**1647 Z****N° 232. 27.4 grams**

A good coin. The obverse includes a clear initial Z with a thin lower arm, tilted downwards. On the reverse the date's reduced numbers (647) are sharply visible. We emphasize that this piece does not possess the authorization seal to circulate, since it is dated 1647, a year in which coins were devalued 50%, prompting the smelting of pieces of 4 and 8. *S.B.C.: lot No. 686.*

**1648 Z****N° 233. 27.7 grams**

An off-center coin bearing a Z on the obverse. The reverse is not very sharp and the date is shifted 180 degrees with respect to its normal position. The last two digits include a partially visible 4 and a very clear 8 at the end. Verification of the 8 finalizing the date's numerals is the separating period and part of the peripheral words ET IN (for Et Indiarum). This coin was not resealed for circulation.

1649 Z

N° 234. 27.2 grams

Initial Z is not centered and it almost appears to be placed in the field of the small left hand lion of Leon in the shield. Reverse: a very clear date 1649. The countermark authorizing circulation is clear.



N° 235. 22.0 grams

An impeccable coin (with the exception of the crack), with evident initials and dates on both the obverse and the reverse. The decision to devalue these coins during those years (with the corresponding countermark) appears to be justified in this case. The piece shows no evidence of trimming or wear and tear, and a loss of 5.4 grams is too large to have occurred during the wreckage where the coin came from. This represents neglect, or plain fraud by the mint.

## ASSAYER JUAN RODRÍGUEZ DE ROAS (RODAS), 1649-1651

### INITIAL O

In 1649 Spain sent Juan Rodríguez de Roas to substitute Zambrano and to reorganize the situation in existence.

Except for the addition of his initial O, Roas would not change the prevailing guidelines by Zambrano during his first year as manager. Later, in 1650 and 1651, he proceeded to modify the position of the initials and punctuation on the obverse, and introduced smaller changes by using different print to indicate the numeral 5 on the reverse.

Roas was more respectful of weight and prescribed percentages of alloy, although this alone was not enough to restore the user's trust in cobs that resembled the previously incriminated and devalued coins. As a consequence—starting with the new cobs issued in 1649—Roas' production was resealed and deprived of 1/16 of its value, as mentioned above. Inevitably, some of these coins were not submitted for a reseal and they exist today without any trace of a countermark.

### 1649 O/Z

As a first measure, although unfortunate, Roas engraved his initial over Zambrano's by superimposing a simple circle (or a large O) over the Z.



### **N° 236 24.7 grams**

This piece was salvaged from a wreck, losing weight and design clarity. Logically, the coin is almost identical to Zambrano's except for the superimposed O over Z on the obverse. The mint's P has also been touched up. On the reverse numerals 4 and 9 are visible before a separation period. The coin was sealed for revalidation.

1649 O

Assayer O respected guidelines used by Z except for the addition of his initial on the obverse. The O was originally engraved as a simple circle, which later in the year gained a small central dot. Considering that the word Roas or Rodas resembles the Spanish word for wheel, "rueda", the central dot could be interpreted as an intentional attempt to represent the monogram of a wheel with a central axis.

**N° 237. 27.4 grams**

This coin, formerly of the Burzio collection, is not a brilliant specimen. On the obverse there are two initials, creating doubts as to whether it corresponds to assayer Z or O (with or without a central dot). But on the reverse, a number 9 with a broad upper lobe placed at the end of the text is a typical sign of Roas. The coin was not resealed.

**N° 238. 23 grams**

This piece is well deserving of the 1/16 devaluation, given its ridiculous weight. The obverse shows Roas' initial to the left, the coat of arms affected by the double imprint and the application of the circulation seal. It should be mentioned that the numeral corresponding to the coin's value is located in the same position as on Zambrano's pieces. Minting on the reverse shows disarray (edges are smooth and not struck) but provides a clear reading of the letters ANO and digits 1, 4 and 9. The last digit is separated from the legend ET by a period instead of a star.

Roas' production is at its lowest during 1649 when compared to future years, because Zambrano was the only one working for most of that year.



**1650 O**

During this year, Roas modified the coin's appearance. Blanks were broader and larger, providing higher precision in the thickness of the blank as well as improved space for complete and accurate minting. Obverse: both assayer and the mint's initials are located to the left of the shield, enclosed by two dots and divided by one. In 1650 and 1651 initial O always included a central dot. To the right of the shield, the 8 is displaced upwards. Below it there is another initial O identical to the one on the left, also enclosed by two dots but lacking the third separating one. On the reverse, as explained earlier, both design and dates are clearly visible.

A curious fact is that Roas indistinctly used three types of print to represent the date's digit 5 within the same period.

- **Spanish Type:** the upper part of the 5 is a semicircle and the lower part is a transverse line towards the left, transforming the number into the image of a small snake.

- **Colonial or Local Type:** the 5 is more modern, presenting straighter lines on the upper section of the number.

- **Modern Type:** the 5 does not differ from a current number. Each digit is separated by a period. This is probably the system utilized on Royal coins, sporadically applied to ordinary currency.

These characteristics remain unchanged under Roas during 1650 and 1651, as they also do with Ergueta in 1651. Ergueta's production from 1652 is difficult to judge since very few specimens are currently known.

Most of the coins have been resealed to authorize their circulation.



**N° 239. 25.7 grams**

This piece was found in wreckage. The obverse shows a detailed design. To the left, two initials are visible. The seal affects the assayer's initial. To the right, a number 8 in the typical print of the period is located above initial O, forming a group enclosed by two dots. On the reverse, the design is clear, especially the date's numbers 650, the 5 *spanish* in style.



**N° 240 27.5 grams**

On the obverse of this coin, both initials to the left of the shield and the number 8 to the right stand out. On the reverse, clearly resealed, are the numbers 1650, the 5 printed in *spanish print*.



**N° 241 27.6 grams**

The obverse bears a weak imprint, although initials and numeral are clear. The reverse is sealed, its lineament slightly blurry, but showing clear numbers 1.6.5.0, all separated by periods and printed in the style of the third group.



**N° 242. 24.6 grams**

A piece from a wreck, with consequently lower weight but maintaining the clarity of the design. Obverse: resealed; despite a very clear shield the only visible feature of the partly erased text is the assayer's initial O to the left. Reverse: lions are outstanding and numerals 6.5.0 are somewhat displaced within the legend. Print pertaining to third group.

**1651 O**

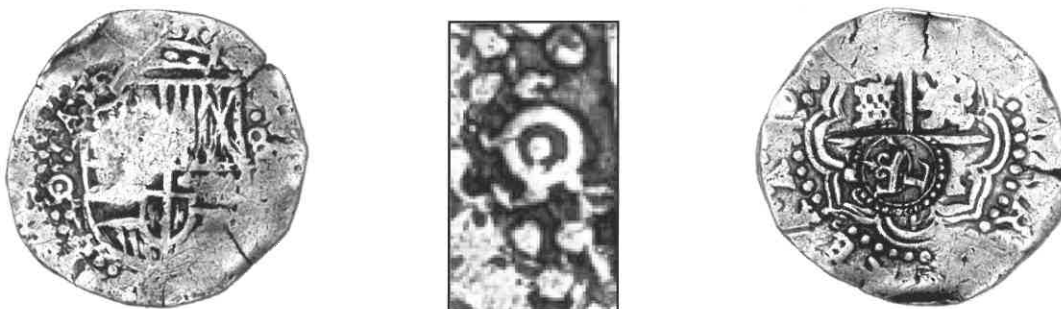
This year's coins did not change with respect to the previous year.

**N° 243. 27.4 grams**

The obverse bears all elements necessary to identify both the monarch and the assayer. The reverse is sealed for revalidation and reads the year 1651 between two periods. Number 5 pertains to the style of the first group (*Spanish*).

**N° 244. 27 grams**

Obverse shows double striking and very clear initials on the left. To the right, the assayer's initials seem to be missing. The only remaining feature is the coin's numeral. This feature would be an anomaly given that all pieces of the time bore the initial to the right. The reverse very clearly reads the year 1651 (with a 5 pertaining to the second group, *Colonial*). We emphasize that this coin is not sealed.

**N° 245. 27.7 grams**

This coin is nice, although it has a partial double imprint on the obverse. The mint's P is illegible. The assayer's initial presents Roas' unquestionable central dot. On the lower external area of the O, two appendixes are present, one to the left and one to the right. Additionally, the upper section of a superimposed S over O appears to be showing. This could be considered as a monogram composed of letters O R S, identifying the name Roas. We remain uncertain about this detail, which could derive from the displacement of dots from the inner border.

The reason why Roas abruptly ended production is unknown, especially since he had been sent from Spain to execute a newly thorough and meticulous coinage. Perhaps Roas, who was an able and experienced professional, was sent to assist Francisco de Nestares with the moralizing management reforms of the Potosi mint. Once the objective had been reached and the structure was reorganized, the decision could have been to remove him favoring Antonio de Ergueta to provide the Potosi currency with security and normality through almost 30 years of steady work.

In regards to Roas' cobs, one could add their size and alloy was very good and their design detailed. His coins can be catalogued amongst the best cobs produced during that period in Potosi.

### ASSAYER ANTONIO DE ERGUETA, 1651-1652

#### INITIAL E

Antonio de Ergueta, as Ballesteros before him, was one of the most prolific assayers of the Potosi mint. His initial would appear on cobs from 1651 to 1678, over a span of 25 years. He began his duties as assayer when still very young, but already having gained sufficient experience to occupy this position during delicate times.

Ergueta's operations began suddenly. During 1651 he engraved his initial over Roas' O. Later in 1651 and 1652 he applied it on a blank field, maintaining the Crowned Shield image.

During a brief period in which he minted cobs in the same style as his predecessor, the design remained the same, since his intentions were not to innovate but rather to prepare a new design with Francisco de Nestares, who introduced the Pragmatic of 1650, which reported on the fundamental changes to be applied to new cobs.

Below we illustrate the last two years of production by Ergueta, which coincides with the disappearance of the Crowned Shield design.

#### 1651 E/O



N° 246. 26.1 grams

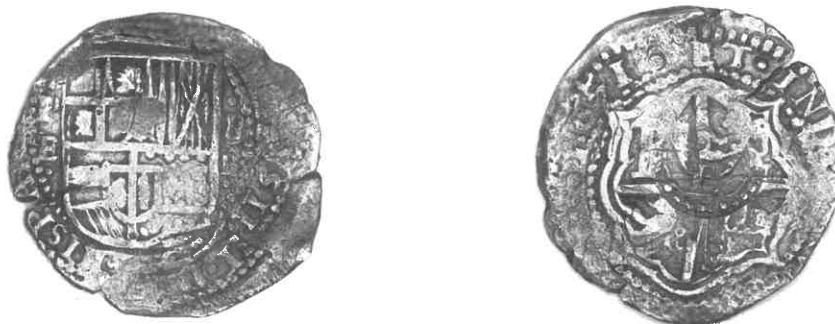
**Obverse:** to the left, the visible E is clearly engraved over a preexisting O. The secondary engraving is harder to perceive on the right-hand side. Punctuation corresponds to the year 1651, assayer O. The seal qualifying the cob for circulation is superimposed covering part of the shield. **Reverse:** an evident 1651, with a *Colonial* style 5.

1651 E**N° 247. 26.7 grams**

A sealed piece, in which the assayer's initial was engraved on a blank field. No separating periods are present between the mint and assayer's initials. To the right, the numeral is illegible. The reverse only reads AN (for "año" or year), then a 1 followed by an empty gap of two spaces and a second 1 corresponding to the date's final digit (in turn followed by the period preceding ET).

**N° 248. 27.5 grams**

A piece with no seal. A perforation is present at 12 o'clock. On the obverse punctuation remains typical for the year. The reverse reads ANO, as well as the separating period with a 1 and 6.; the 5 is illegible and coincides with the perforation. Also legible is the date's final numeral 1 and the ending period.

**N° 249. 24.4 grams**

This piece was salvaged from wreckage, therefore weighing less than the prescribed weight, although details remain well preserved. Obverse: initials and punctuation typical for the year and assayer are clearly evident. Reverse: bears the circulation qualifying seal. The year reads 651, with a *Colonial* style 5.

**1652 E**

No changes in coin type compared to the previous year took place in 1652, and production was very limited because during 1652 Ergueta began to work with a new design. As a consequence, and confirming this notion, there are currently fewer cobs with crowned shields dated 1652 by Ergueta than test pieces he produced while trying to achieve the final design with the Pillars of Hercules



**N° 250. 27.2 grams**

**A beautiful coin, perhaps one of the best of the few known cobs of this kind. Obverse: to the right the assayer's characteristics are clearly visible. To the left, both initials are erased by the seal qualifying the cob for circulation. Reverse: the writing AN (for "año") is unmistakable, as are the numbers 652 preceding the final period of the legend separating the date from ET (Et Indiarum). The 5 pertains to group two, or *Colonial* in style.**

This coin concludes the minting period of cobs with the glorious Crowned Shield.

For an entire century these cobs traveled the world—particularly Europe—creating changes in the political and economic structure of the continent. In many cases, these coins triggered episodes that proved chaotic to the financial balance of the society, occasionally seeing the crumbling of entire regions.

An Italian chronicler at the time said: "These are the years during which the sea of silver springing from the mountains of Peru mysteriously shakes our continent generating misery rather than fortune."

The amazing flow of silver—represented mainly by the Crowned Shield cobs—made its indelible mark on the lifestyle and structure of the South American colonies. This influence also extended to migratory currents, displacing maritime routes and their defense, and arousing power struggles and confrontations in both Europe and America.

This effect held particularly true for a period between 1550-1580, during which production was at its highest, thus increasing the influx of silver Spanish American coins. Later, when production in Potosi diminished and the crisis caused by the avalanche of the South American mineral was overcome, both the European and American systems stabilized upon new structures.

Some of the currently known cobs are the result of efforts in the last several decades to salvage coins from Spanish shipwrecks, in particular the wreckage of the *Atocha* of 1622, the *Concepción* of 1641, the *Capitana* of 1654 and the *Maravilla* of 1656. The majority of the resealed coins come from these later two ships, since very few of them were previously known. Thousands of coins from Mexico and Potosi were recovered from these ships, although few were in good condition. The recovered pieces lose some of their original beauty due to the natural effect of the ocean's inclemency and the consequent cleaning process.