

**Weight and Fineness of Cob Coinage in the New Kingdom of Granada  
Santa Fe (de Bogotá) 1620-1756 and Cartagena (de las Indias) 1620-1635, 1655**

**Private mint treasurers: 1620-1749**

**Provisional treasurer: 1749-1753**

**Royal treasurer: 1753-1756**

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*Nuevo Reino de Granada* (New Kingdom of Granada) was the Spanish region in northern South America which today approximates the area of Colombia, Venezuela and Ecuador. The authorized mint at Santa Fe and its branch mint at Cartagena struck irregular hand hammered coins that we call cobs (in Spanish *macuquinas*). There are four categories of cob coins authorized and produced in Nuevo Reino. The mint in Santa Fe was authorized to produce gold and silver coins in compliance with weight and fineness laws applicable throughout the king's dominions. In addition to standard gold and silver Cartagena was authorized to make two types of special coins, *vellon-rico* (enriched-billon) and *plata-baja* (low silver).

**Gold coins** (*oro*) were produced throughout the entire period at 22 karat purity (916.667 fine) and weight of 68 escudos to the mark.

**Silver coins** (*plata*) were produced throughout the entire period at 11 dineros plus 4 grains purity (930.555 fine) and weight of 67 reales to the mark with the possible exception of cuartillos in 1755.

**Enriched billon** (*vellon rico*) cuartillo coins were authorized from 1620-25 for Cartagena only. The purity was one part coin-silver to four parts copper (186.111 fine) and the weight was 100 cuartillos (25 reales) to the mark.

**Low silver** (*plata baja*) was authorized in 1625. Due to public complaints production ceased in 1626 and the coins recalled. The purity was 247.917 fine and the weight was 25 reales to the mark in denominations of 1/4, 1/2 and 1 real. No specimens have been confirmed; however it is possible that the half-real illustrated as Figure 2 in Blanton (2007) is plata baja except that its date, 1622, precedes the plata baja authorization.

| Coins             | Years     | Fineness | value/mark (230.1232 g) | mass                                       |
|-------------------|-----------|----------|-------------------------|--|
| Gold              | 1620-1756 | 916.667  | 68 escudos              | 3.384g / escudo                            |
| Silver            | 1620-1756 | 930.555  | 67 reales               | 3.435g / real                              |
| Enriched billon   | 1620-1625 | 186.111  | 25 reales               | 1/4 R 2.301g                               |
| <i>Plata baja</i> | 1625-1626 | 247.917  | 25 reales               | 1/4 R 2.301g<br>1/2 R 4.602g<br>1 R 9.205g |

**Table  
Authorized years (not necessarily the production period)**

Notes:

1. The mark (*marco*) is a standard weight coming out of the middle ages. The “weight” or mass of the mark varied considerably over time and location. Barriga (I: 30) uses 230.1232 grams as the mass of the mark and that is what is used in this paper.
2. The Catholic Monarchs Ferdinand and Isabella reorganized the coinage system in 1497. They set the weight of the gold “*excelente de la granada*” at 65.333 to the mark of pure gold but not less than 23.75 karat. They set the weight of the silver “real” at 67 pieces to the mark and the purity to 11 dineros and 4 grains. There are 12 dineros in the whole and each dinero has 24 grains (of purity, not weight) making 288 grains for 1000 fine silver. Eleven dineros and four grains  $((11 \times 24 + 4) / 288)$  is 930.555 fine (Heiss I: 323-4).
3. It seems that the gold “escudo” first appeared in 1535. In a decree of Charles I dated 1537 the escudo was specified at 68 pieces to mark with a fineness of 22 karat (22/24, 916.667 fine). This was for the Kingdoms of Castile (Heiss I: 325).
4. Further monetary laws were decreed but as of 1620 the escudo was still 22k with 68/mark; the real was 11 dineros and 4 grains with 67/mark.
5. In 1620 King Philip III contracted with Captain Alonso Turrillo de Yebra to build and operate a mint in Santa Fe and a branch mint “*oficina*” in Cartagena. Turrillo was authorized to strike gold and silver plus a special billon coin. This was the first authorization for gold coins to be struck in the New World. (Friede: Document 4, 52-61).
6. Gold coined at Santa Fe was to conform to current standards. *Los escudos sencillos y dobles se labrarán y fabricarán de la misma forma que se hacen y labran en las casas de moneda de estos Reinos, sin exceder en cosa alguna, excepto que se pondrá una N y R latinas, en la parte de las Armas de Castilla y León, para que se conozca se hizo en el dicho Nuevo Reino.* (Friede: Document 4, 52-61).
7. Silver coined at Santa Fe was to conform to current standards. *La moneda de la plata será, como queda referido, en la cantidad y piezas conforme a lo que quedáreis de acuerdo con los dichos presidente y Audiencia y más conviniere al bien y estado, contratación y comercio del dicho Nuevo Reino. En cuanto a la cantidad de piezas por marco y peso de piezas, guardaréis las leyes y Reales ordenanzas y declaraciones de ellas de las demás casas de moneda de estos Reinos.* (Friede: Document 4, 52-61).
8. Enriched billon was a special coin. *La moneda de vellón rico que, como queda dicho, habéis de labrar para la contratación y comercio por menor del dicho Reino, ha de ser ligada a cuatro marcos de cobre, con uno de plata, de ley de once dineros y cuatro granos, como se hace en las demás casas de moneda de estos Reinos. Cada marco hecho moneda de esta liga, ha de tener de valor veinticinco reales, y cada real cuatro piezas, y todo el marco, cien piezas, y cada cuartillo, cuarenta y ocho granos de peso.* (Friede: Document 4, 52-61).

9. Plata baja (low silver). No coins were produced in the years 1623-24 while Turrillo was in Spain dealing with mint matters. It was decided to stop making the enriched billon cuartillo coins and begin making coins with a little more silver in them. These new coins called "plata baja" were authorized by royal decree dated 10 March 1625 and ended by decree of 24 August 1626 (which ordered the plata baja to be recalled and melted down). They were to be produced in 1/4, 1/2 and 1 real denominations at the rate of 25 reales to the mark. The plata baja was 10 parts of "pure silver" of full legal fineness of 2380 maravedis mixed with 30 parts of copper. According to the intention of the decree the plata baja was 25% silver (10 parts pure silver/ 30 parts copper) but with the technical limit of silver refining recognized at 2380/2400 the fineness specified was  $(10 \cdot (2380/2400) + 30)/40 = 247.917$  fine. ...*se labrasen quartillos medios Reales y reales cencillos de plata baja ligando diez onzas de plata fina de toda ley de dos mill y trescientos y ochenta maravedís con treinta de cobre y que esta mezcla que había de tener cuarta parte de plata de toda ley y tres de cobre...cada marco de peso de esta ley veinte y cinco reales cencillos cinquenta medios y cien quartillos...* (Barriga I: Document Number 7, 173-78). The plata baja was authorized for Santa Fe and Cartagena, but since the authorization was revoked in 1626, before the Santa Fe mint opened in 1627, all pieces (except trial strikes made in Spain) must have been produced in Cartagena (Friede: Document 72, 238-40).
10. King Philip V made monetary changes and codified these in Royal decrees issued in 1728 (*Autos Acordados, lib. V, tit. XXI, autos LIX, LX y LXI*, Heiss I: 390-97). The most well known of these changes was the requirement to mechanize the mints in Spain and in the Indies ... *Todas de las monedas de plata, que se labraren en las casa de estos mis Reinos, i de los de Indias, serán acuñados en ingenios, ó molinos de agua, ú de sangre, i de figura circular con un cordoncillo, o laurel al canto...* Other changes included reducing the silver purity from 11 dineros and 4 grains (930.555) to 11 dineros (916.667) and lower the weight from 67 to 68 reales to the mark. These decrees were not implemented at Santa Fe due to contractual rights of the mint owners. The mint continued to operate as it had from the beginning. The mint continued cob production according to specifications in place before the decrees of 1728. *En la de Santa Fe, las ordenanzas no habían podido incorporarse, por los contratos, que por juro de heredad, venían disfrutando los Tesoreros Particulares...* (Barriga II: 9). The end of the private mint began in 1748 after gold merchants complained to Viceroy Sebastián de Eslava y Lazaga about irregularities at the mint (Barriga I: 129). Manuel de Porras was appointed provisional treasurer and oversaw the mint from 30 January 1749 until 30 July 1753, after which the Crown administered the mint for its own account (Barriga I: 133-36). The royal mint continued production of cobs until the mill mint was operational in 1756; both cob and milled coins were produced in 1756.
11. Gold and silver coin denominations produced were gold: 1, 2, 4 & 8 escudos and in silver: 1/4 real (cuartillo), 1/2 real (medio), 1, 2, 4 & 8 reales.
12. The first gold cobs produced for the royal account was on 10 September 1753 (Barriga II: document 35, 211-13).
13. No silver cobs were produced under Royal administration except the 1/4 real in 1755 (Barriga II: document 37, 214-15). Despite discrepancies in Barriga concerning the purity of silver post 1728 we tentatively hold that these were at 11 dineros (916.667 fine) and weight of 67 reales to the mark (268 pieces per mark). Document 37 concerning the 1755 cuartillos specifically says that the fineness was 11 dineros

(...enzaidos con una certificación en que declara estar arreglada a la ley de onze dineros y que por tal los daba para que corra y tenga el uso permitido). According to document 39 (Barriga II: 219-221) concerning the first milled silver coins of both eight reales and cuartillos the purity is 11 dineros. However, Barriga's table (II: 11) shows all silver denominations from cuartillo to eight reales at 11 dineros and 4 grains. In volume III Barriga has summary production tables; at the beginning of the table for silver he specifically says that the weight of silver cobs was 67 to the mark and did not change to 68 until milled coins were produced. *La talla de plata, según Reales Cédulas, fue para la moneda batida en Santa Fe de 67 reales por marco. Se usó durante toda la época de los Tesoreros Particulares, y solamente cuando la Casa de Moneda pasó a manos del Rey, en la moneda de cordoncillo, se comenzó a emplear la de 68 reales por marco, o sea \$ 8, 4 rs. Esta sobrevaluación en peso y en ley, tenía por objeto, mantener en circulación la buena plata con la moneda de oro de 22 quilates* (Barriga III: 530). At 67 reales to the mark a cuartillo weighs 0.859g, at 68/mark 0.846g. The cuartillo illustrated in *Gaceta Numismática* 170/171 (Blanton 2008: 35) weighs 0.87g.

14. The Crown closed the Cartagena facility in 1635 but an illegal mint opened in 1655 and briefly operated for some months (Proctor and Blanton).
15. As mentioned in notes 10 & 13 the matter of weight and fineness of silver production post 1728 is unsettled. Regardless of whether the private owners mechanized the mint or not it seems that they should have followed the other parts of the law. Until additional material comes to light that clarifies this I follow Barriga who shows 930.555 for silver purity and 67 reales to the mark except for the year 1755.

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