

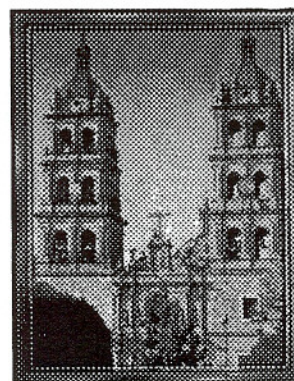
THE 1840/38/31 DURANGO 8 REALES AS AN ILLUSTRATION OF MEXICAN MINTING METHODS IN THE NINETEENTH CENTURY

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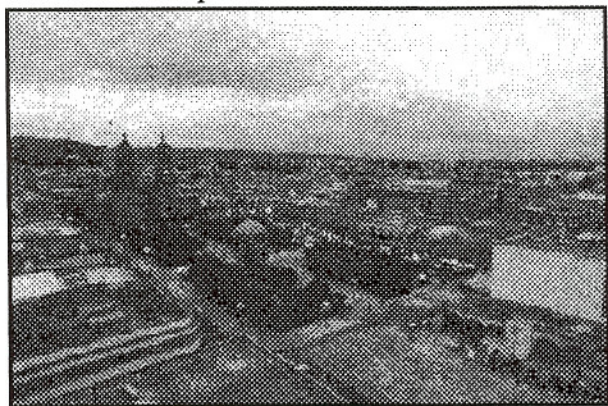
A number of years ago I acquired an example of this coin at the Long Beach Coin Show. Since then I have bought and sold many 8 Reales, many of them rarer and more expensive, but this one remains a favorite. Through it is not a rare or exotic variety, it exemplifies most of the challenges facing Mexican coiners in this period.

Of the fourteen mints that produced 8 Reales, Durango is considered a second tier mint, after Mexico City, Guanajuato and Zacatecas. However, in the 1830s and 1840s Durango was a very prolific mint and 8 Reales from that time are readily available. *The Standard Catalog of World Coins* lists the 1840/38/1 Do at \$50 in Extremely Fine and \$125 in Uncirculated. The mintage is not given, but the price is in accord with other 8 Reales of the period.

Those familiar with the series will know that Durango used an eagle peculiar to that mint. Unlike the scrawny bird found on coins from other mints, the Durango eagle is a majestic symbol worthy of a great nation. This eagle, together with the delicacy of the lettering and the finely modeled cap and rays on the obverse, has led many to conclude that the master dies are of European, likely French origin. The eagle will be found on the other silver and gold denominations and on many different dates, so the variation was intentional.



The 1830s saw the introduction of steam machinery to the U.S. mint. The Mexican mints, being leased to European Firms (the Durango mint was leased to M. Bras-de-Fer and J. A. Pescador during 1829 - 44), were not far behind, though I am uncertain of the exact date in which steam presses were installed at Durango. Dunigan and Parker state in *Resplandores* that the first steam coin press in Mexico was installed at the Guadalupe y

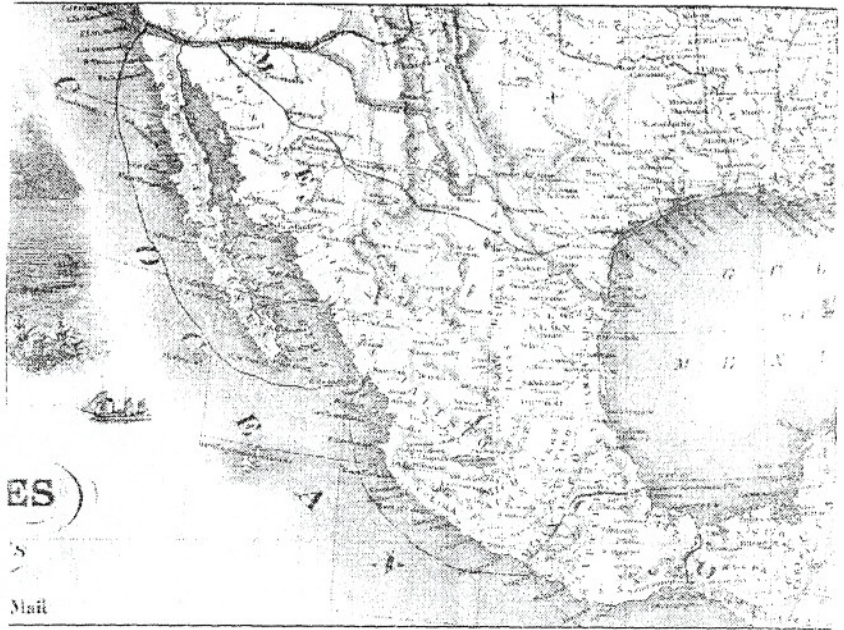


Calvo mint in 1847. Prior to steam, a screw press, powered by animals or human sweat, would have been used. It is likely that the replacement of screw presses by steam machinery was gradual. The Philadelphia mint maintained a screw press for striking proofs and medals until the 1880s, perhaps longer. The U.S. mint first used a closed collar to hold the blank in 1828 to strike dimes. The last U.S. coin to be struck without a collar was the half-dollar of 1837. The innovation was slow to catch on in Mexico and was not used extensively until the

decimal coins of 1869. While the closed collar permits the striking of perfectly round, perfectly centered coins, it does not permit the use of lettered or ornamental edges (the

segmented collar, used to impact a lettered edge to St. Gaudens double eagles, is a later invention). Perhaps this is why it was never used on cap and ray 8 Reales, whose corded edges are the feature most difficult to counterfeit. The specimen shown here is typical of coins struck in an open collar. It is slightly out of round and slightly off center. It is also likely that the dies were misaligned slightly.

The branch mints were supposed to get their dies from the central mint in Mexico City, but the chaotic state of government and society in general doubtless left the branch mints to their own devices for extended periods of time. The 1840s were marked by a number of coups, counter-coups, provisional governments and military *promunciamientos* unusual for Mexican history. The confusion and anarchy in Mexican government was a major cause of the Mexican-American of 1846. For example, General Antonio Lopez de Santa Anna of Alamo fame was President of Mexico on seven different occasions during his checkered career.



In 1840, there were two Presidents of Mexico, Anastasio Bustamante (April 1837 to October 1840), and Nicolas Bravo (July 1840 to September 1841). Frequently, government or rebel armies (a distinction of little relevance to the victims), desperate for ready money, would descend upon the mints and seize whatever inventory was on hand.

The manufacture of dies was the most difficult process at the mint. Today, mints use 52100 steel to make dies, a 1% carbon, 1.45% chromium steel that can be heated to high hardness. After tempering to improve impact resistance and chrome plating to improve wear resistance, dies last for hundreds of thousands of strikes. Back then, steel was a magical substance that sometimes lasted forever or sometimes shattered on the first strike and nobody really knew why. If the blacksmith got lucky and made a good die, the mint would use it as long as possible. If the year ended, one annealed the die, stamped a new digit, hardened it and kept on using it. The specimen shown here has a double overdate; the 1838 is clearly visible under the 1840, but under the 8 are the remnants of a 1



While overdates are very common in Mexican coinage, double overdates are unusual. A look through *Resplandores* and Krause-Mishler shows only three other occasions in the 8 Reales series (1833/2/1 GaFS, 1835/3/1 DORM and 1856/5/4 MoGF). Mintmasters (RM on this coin, for Ramon Macareñas, mintmaster 1830-48) frequently changed mid-year; to avoid scrapping large numbers of dies, the new mintmaster's initials were often stamped over the old. In addition, there are prominent raised lines crossing the coin on both sides; these are die breaks indicating the terminal stages of the die. Soon after this coin was made, large chunks of die steel would have broken away, rendering the die useless. This die would have shattered before it became very worn; in other cases, dies were used until they were extremely worn, with denticles missing and letters distorted.

All coins tell a story; that is what makes them fascinating. Few comprise as complete an encyclopedia of history as the 1840/38/1 Do 8 Reales.

Sources:

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