## Detecting Counterfeit Silver Dollars

by Robert E. Luna



The inception of this article started over a year ago when I was asked to create a speaker's program for the CSNA symposium in Vallejo, held on October 23rd of 2010. I did not need to think very hard and came to the conclusion, after finding many US silver dollar counterfeits on the market as well as seeing many other examples at local coin clubs and swap meets, that the time was right to share knowledge as well as new developments on this topic with my fellow collectors,

Licking your chops over these gorgeously shimmering Standing Liberty quarters and other US coins? Better hold onto your checkbook, because that batch is fake.

investors and yes, even dealers.

The business of counterfeiting is nothing new. The very first coins were hand struck in Asia Minor by the ancient Lydians around 700 BC and probably attracted many counterfeit attempts, even with the threat of dismemberment or death. What is new is the quantity and quality being

Counterfeiters are even turning their efforts towards trying to duplicate realistic slabs in a further attempt to fool the unwary collector. The best advice to avoid being cheated? Know who you're dealing with when you buy collectible coins.



minted in Asia as well as other parts of the world for import into the US marketplace which are meant to both deceive the purchaser as well as circumvent the Hobby Protection Act of 1973. Coin presses used by the United States Mint and retired sometime in the 1920's were obtained by the Chinese counterfeiters when these presses were labeled as "excess inventory" by our own GSA (Government Services Administration) and sold. They have since been ramping up their counterfeiting operations using high tech laser technology to create ever new and better dies. These dies are created using a multi-angle laser scanning technique to create dies for the minting of counterfeit coins that are becoming increasingly more difficult to detect.

Counterfeiters are not only counterfeiting US silver dollars but also specific coins of other types and denominations, i.e.; the 1916D Mercury dime, 1909S VDB Lincoln cent, and Standing Liberty quarters, just to name a few. According to an interview of a counterfeiting operator in China by *Coin World's* Susan Headley, it was stated that they are looking for US based collector/partners, which they find on Ebay, and they then ask these US based collectors to supply

them with genuine examples of better type and grade of US numismatic material.1 "Asked how he manages to produce such convincing counterfeits, (it was explained) that he uses genuine examples for his models. He downloads digital information about the genuine coin into a computerized coin sculpturing system via a laser beam input. The laser system scans the coin using a method of triangulation, taking constant readings from thousands of different data points, producing a three-dimensional model of a coin that is extremely accurate." These models are then used to create counterfeit coin dies.

There are legal copies of US coins coming out of China that are considered "hobby collectibles" and must be incused with "COPY" on the coin's obverse or reverse. These abide to the US Hobby Protection Act of 1973 and are legal and considered acceptable for sale on the US market. These coins properly marked "COPY" are not meant to deceive the purchaser, collector, or the dealer.

Locally, here in the San Francisco Bay Area, people are using a process called cold laser technology

<sup>1</sup> Krause Publications, Coin World, Susan Headley, December 8, 2008, page 90.

to cut open a professionally graded and slabbed high value genuine coin and replacing it with two split halves of more common dates which match the date, mint mark, and grade of the originally graded coin. For about half a century counterfeits have been created by employing the high-detail lost wax process, using new polymers that hold a lot of detail. Counterfeit coins are not always the shiny, new looking "uncirculated" coins that may be suspect due to their apparent mint newness. Counterfeiters are using tumbling machines and chemicals to artificially age and tone their newly minted coins in an effort to add to the deception.

It is an interesting fact that in China it is not illegal to copy coins as long as they are dated pre-1949. I am sure however, this law is both loosely interpreted and enforced or not enforced at all. In Shanghai and other commercial centers there are convincing counterfeit US silver dollars, and other US denominations as well as counterfeits of Chinese coins on display. Also on display are antiquities,

artwork, and other collectibles all I am sure of dubious origin.

There are many methods used to detect a counterfeit silver dollar. Looking for actual .900 fine silver content is one but may not always be definitive because some counterfeiters use planchets made of .900 fine silver to mint US silver dollars, and these may or may not be of correct weight, diameter, and color.2 Also stated in Coin World's interview in China, "The biggest challenge (he) currently faces is in getting proper planchet stock. He does not mix the metal alloys in his mint, so he must buy rolled stock from others, who are not getting the alloy correct most of the time. This causes the coins to be overweight or underweight, and also to be the wrong color sometimes." In most counterfeit US silver dollar coins I have seen to date the planchet composition is not .900 silver but usually combinations of nickel/zinc or nickel/copper. However, .900 fine silver content examples are in the marketplace.

2 Krause Publications, Coin World, Susan Headley, December 8, 2008, page 92.



Do these look like the real deal to you? Dozens of dies made to produce "US coins"? Better look again. Every one is a fake, made to produce a counterfeit coin to fool tourists and unwary collectors.

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The Chinese counterfeiting activity isn't restricted to duplicating US coins; even Chinese numismatic issues are targets. So long as the material being counterfeited is dated before 1949 it isn't even illegal in China to produce such misleading material.



In the cases where the coins are made from non-silver alloys there are a number of characteristics by which you can determine if you are looking at a counterfeit. First, the color is not right. It is grayish or mottled in color with an uneven or grainy surface to the fields and design surfaces. The design surfaces may also exhibit a flat or rounded appearance along the edges. When you spin the coin on a table and let it come to rest the sound does not ring right as on a genuine .900 fine silver coin. Some coins are underweight, enough so that you can actually feel the difference between a genuine and

a counterfeit in your hand. Accurate measurement by a digital scale and caliper is much preferred. The specific gravity of a coin may be done to determine the metal type. This test may be outside the ability of most collectors; however it does represent another method in the arsenal of discovering counterfeit coins.

In many instances the reverse of a counterfeit coin is in the wrong relationship to the obverse of the coin. Holding a genuine coin in front of you between your thumb and index finger with the obverse design in the right orientation you should then flip



A stockroom in the lair of a Chinese counterfeiter's factory, holding hundreds of pounds of materials awaiting illicit distribution.

the coin and expect to see the reverse in the correct orientation with the design top to bottom. In a counterfeit the reverse design may be found to be anywhere from 20 to 180 degrees counter-rotated with the obverse of the coin. This test however is not true in all instances. They are getting better in minting US coinage with the correct obverse/reverse orientation.

Counterfeit coins, whether silver or non-silver alloy, can be detected by several other characteristics, or rather, a combination of suspect characteristics which give you clues that will keep you from being victimized. The following are a few counterfeit characteristics to be aware of in US silver dollars by specific type.

Counterfeit Bust Dollar Reverse (Image 1) showing a slight counterrotation of the first coin and a 180 degree counter-rotation of the second coin from the correct position. Also, note wrong grayish/mottled color and rounded/soft design areas. The second and the third of these three coins are excellent examples of denticles being



Image 1: All three coins are counterfeit (bust dollars - reverse sides shown). Rotation is incorrect, color/finish is "off", and the denticles on the two on the right are very crude.



Image 2: The die clash at seven o'clock is undocumented in reference works, and again, the denticles are crude and uneven. Note the grainy texture of the fields and flat design.



Image 3 (above) and 4 (below): A genuine Seated Liberty dollar is on the left, the two on the right being counterfeit. Details such as denticle appearance and color of the coin are the main tip-off for these, along with the too-wide rims.



crudely added by hand to a die that was deemed less than acceptable to the counterfeiter's eye

Counterfeit Bust Dollar Reverse (Image 2) with a number 4 die clash at seven o'clock which is not documented in any numismatic reference material. Also, note grainy or mottled field, rounded or flat design and uneven or incomplete denticles.

Seated Dollar Obverse and Reverse (Images 3 and 4) note that the rims with denticles on the counterfeits are a bit too wide. This is because either the die was too small or the planchet was too large. Also, note the wrong color, which has a smoky grayish hue as compared to the genuine coin; however the obverse/reverse relationship is correct when flipping these coins over. These two counterfeits also exhibit a filled die on the union shield as well as on the tip of

the eagle's left wing as you look at the coin. This is most likely due to a flaw in the sand-casted die.

Trade Dollar Obverse (Image 5) showing two counterfeit examples with the first having been dipped as well as showing an uneven/weak strike of the stars and the second exhibiting the wrong smoky gray color. Also, both counterfeits show short, weak, or non-existent denticles as compared to the genuine.

Peace Dollar Reverse (Image 6) showing a 45 degree counter-rotated die as well as exhibiting an extraordinarily strong and bold strike, especially in the lettering, for a series which is known to be weakly struck.

My favorite little detail to look for is on the Morgan silver dollar (Images 7 and 8). The genuine coins, no matter how bag-marked or circulated have a little physiologic feature in the center



Image 5: With a genuine trade dollar on the left for comparison, note the color differences (the middle coin - a counterfeit - has been dipped), the weak and uneven strikes, and deficient denticles of the two counterfeits on the right.

of Liberty's ear; I call it a "nub". This small "nub" in the interior of Liberty's ear is missing on counterfeits. This is just a very small detail to a seemingly genuine Morgan Dollar but with this detail missing—it is a counterfeit! Also, note the wrong grayish color, soft or rounded design image, and denticles which are of different sizes and lengths.

On very close inspection, a counterfeit or tampered coin may seem to have dirt or grease around the mint mark. This mint mark may have been added by being soldered in place. Also, mint marks are added by a small hole being drilled horizontally into

the coins rim to the area underneath where the mint mark is to be placed. A small die, with the selected mint mark, is then inserted into this hole and the mint mark added using an embossing technique on the coins' surface. The coins' disturbed reeding is then re-applied and the deception is complete. More simply, mint marks are removed entirely in an attempt to make rarer dates from the Philadelphia Mint. In this case the field of the coin will not match the area where the mint mark has been removed. In many cases a careful collector need go no further than referring to resource material. Some counterfeits, of course,



Image 6: With a genuine peace dollar on the left for comparison, note the mis-rotated reverse on the counterfeit on the right, plus the unusually strong and bold strike, very uncharacteristic of genuine coins in this series.



Image 7 (above) and 8 (below): The counterfeits above all lack the "nub" in the ear as shown in the genuine Morgan dollars below (also see enlargements).





Enlargements from image 7 (left, the counterfeit) and 8 (right, genuine) shows that the counterfeit lacks the "nub" seen in the central part of the ear (just above the lobe) on the genuine coin on the right.



are not listed in the *Grey Sheet*, *Red Book*, or Breen's and judged suspect. These reference materials even give you warnings about a coins' authenticity, i.e. 1944 Jefferson nickel with no mint mark above Monticello made in a copper/nickel alloy not in copper/silver/manganese as in a genuine coin. The *Red Book* will tell you this wrong metal nickel is a counterfeit.

Many believe that they can protect themselves from counterfeiters by limiting their purchases to coins that are slabbed and graded by PCGS, NGC, or ANACS and exhibit a bar code for identification purposes. Some of these professionally graded coins and slabs have been counterfeited as well. Professional grading services have recently made great strides in protecting the marketplace by improving the design of graded and slabbed products.

Beautiful looking, deceptively labeled slabs with some kind of bar code are in the marketplace. Even simple plastic holders may be used to mask the characteristics of a counterfeit coin.

How can a collector/investor insure that they purchase genuine US silver dollars in today's marketplace? Purchase only from reputable dealers who will accept returns. A reputable dealer who accepts returns and desires to stay in business is not going to purposely distribute counterfeits. Gain knowledge from articles such as this, attend seminars or symposiums where other numismatists discuss topics of educational interest, or hold and examine genuine as well as counterfeits side by side and scrutinize them with good lighting and magnification. Remember that if it is too good to be true, it probably is! Flea markets and swap meets should definitely be ruled out entirely. Many examples of counterfeits in my collection I obtained at swap meets or were obtained from fellow collectors who purchased them at swap meets and were deceived with absolutely very little recourse. One should bring a good magnifier with light, a digital scale in grams, gain knowledge, and most of all compare genuine coins to counterfeits so you have first hand experience as to what either should look like before making a purchase.

On detecting US silver dollar counterfeits one must be aware of not only the correct metal content but also the correct weight, thickness, and diameter as well as all the other counterfeit characteristics covered and not covered in this article. This article cannot fully educate anyone on all aspects of the counterfeiting trade or by which all methods are used to manufacture them. The topic is quite simply too enormous. It is designed to alert those involved in numismatics at all levels as to the scope and ingenuity of this extremely damaging activity.

As my favorite uncle once said to me many years ago, "You will always pay for what you do not know or are not willing to learn"—Uncle Primo Bertola, Little Rock, California.

## A brief biography:

I am a resident of Benicia. I was born in Los Angeles, where my brother and I at eight and nine years of age started collecting coins to fill our blue Whitman folders by extracting change from local laundromats by putting in quarters and getting out nickels and dimes. This of course was to the consternation of the laundromat owners. We then graduated to local banks to get our treasures for our collections. I collected coins up to college and then took a break for the career-building years. I resumed collecting, investing, and learning over the last decade and enjoy the hobby even more now than as an eight year old. Besides having held corporate positions with technical medical equipment companies, I have been a business owner of several business types, including medical equipment repair and a full line pharmacy. I currently own an outdoor advertising sign and custom flag business. I am a member of the ANA, CSNA, Diablo Numismatic Society, Vallejo Numismatic Society, Fairfield Coin Club, and was recently elected as a member of the board of directors of the Vallejo Naval and Historical Museum. I have presented programs locally in Northern California for several numismatic organizations as well as the CSNA's annual symposium in 2009 and 2010 held in Vallejo. A handout booklet was prepared for attendees to take home with them as a reference and reminder as to what was covered in these programs.

Close up silver dollar photos credited to Lloyd Chan (Fairfield) - images 1-8. Remaining photos credited to Susan Headley of Coin World during her interview with the Chinese counterfeiter mentioned in the article