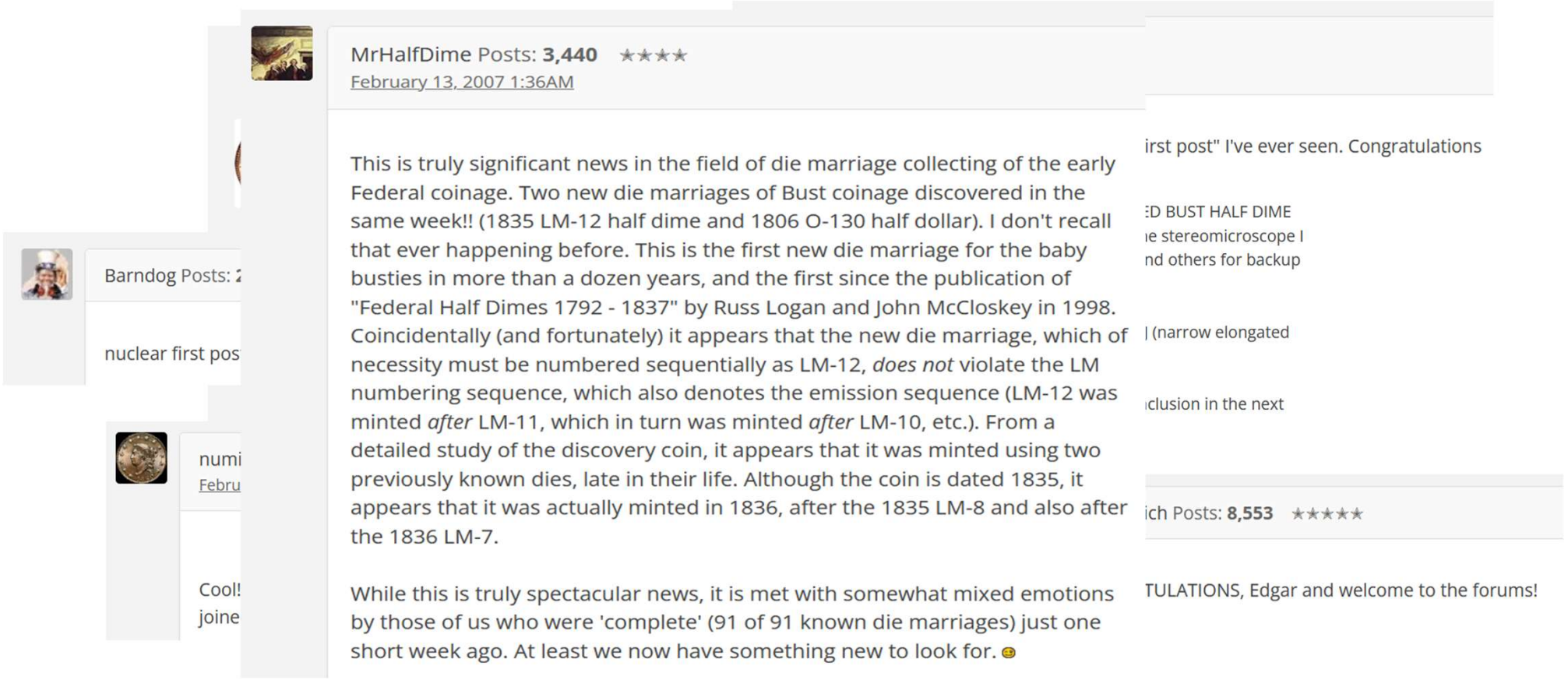
CAPPED BUST HALF DIMES

NEW 1833 REMARRIAGE(S)

Sean Kelly
for the John Reich Collectors Society
at the ANA World's Fair of Money
August 20, 2025

FEVER JOINS THE BOARD

February 12, 2007 – Edgar Souders announces new die marriage of 172-year-old coin



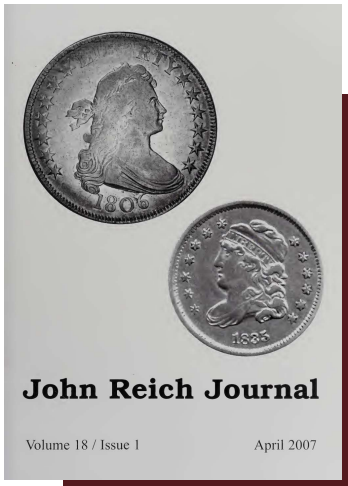
MrHalfDime Posts: **3,440** ★★★★
February 13, 2007 1:36AM

This is truly significant news in the field of die marriage collecting of the early Federal coinage. Two new die marriages of Bust coinage discovered in the same week!! (1835 LM-12 half dime and 1806 O-130 half dollar). I don't recall that ever happening before. This is the first new die marriage for the baby busties in more than a dozen years, and the first since the publication of "Federal Half Dimes 1792 - 1837" by Russ Logan and John McCloskey in 1998. Coincidentally (and fortunately) it appears that the new die marriage, which of necessity must be numbered sequentially as LM-12, *does not* violate the LM numbering sequence, which also denotes the emission sequence (LM-12 was minted *after* LM-11, which in turn was minted *after* LM-10, etc.). From a detailed study of the discovery coin, it appears that it was minted using two previously known dies, late in their life. Although the coin is dated 1835, it appears that it was actually minted in 1836, after the 1835 LM-8 and also after the 1836 LM-7.

While this is truly spectacular news, it is met with somewhat mixed emotions by those of us who were 'complete' (91 of 91 known die marriages) just one short week ago. At least we now have something new to look for.

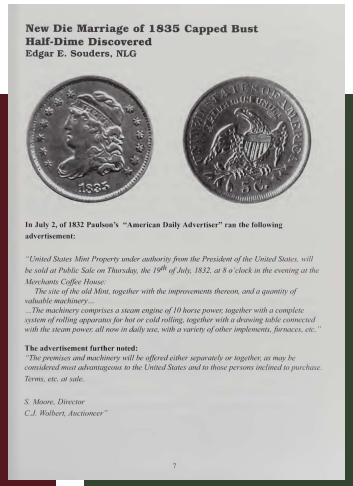
https://forums.collectors.com/discussion/comment/6256535

APRIL 2007 JR JOURNAL



John Reich Journal

Volume 18 / Issue 1 April 2007



New Die Marriage of 1835 Capped Bust Half-Dime Discovered
Edgar E. Souders, NLG

In July 2, of 1832 Paulson's "American Daily Advertiser" ran the following advertisement:

"United States Mint Property under authority from the President of the United States, will be sold at Public Sale on Thursday, the 19th of July, 1832, at 8 o'clock in the evening at the Merchants Coffee House:
The site of the old Mint, together with the improvements thereon, and a quantity of valuable machinery...
...The machinery comprises a steam engine of 10 horse power, together with a complete system of rolling apparatus for hot or cold rolling, together with a drawing table connected with the steam power, all now in daily use, with a variety of other implements, furnaces, etc."

The advertisement further noted:
"The premises and machinery will be offered either separately or together, as may be considered most advantageous to the United States and to those persons inclined to purchase. Terms, etc. at sale.

S. Moore, Director
C.J. Wolbert, Auctioneer"

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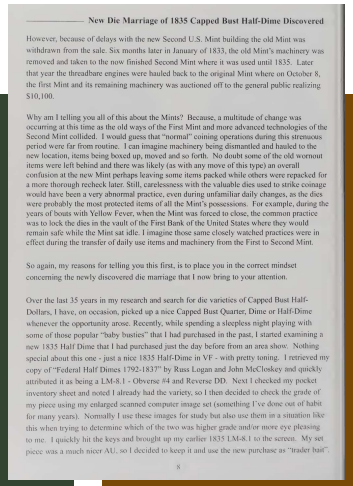

New Die Marriage of 1835 Capped Bust Half-Dime Discovered

However, because of delays with the new Second U.S. Mint building the old Mint was withdrawn from the sale. Six months later in January of 1833, the old Mint's machinery was removed and taken to the now finished Second Mint where it was used until 1835. Later that year the threadbare engines were hauled back to the original Mint where on October 8, the first Mint and its remaining machinery was auctioned off to the general public realizing $10,100.

Why am I telling you all of this about the Mints? Because, a multitude of change was occurring at this time as the old ways of the First Mint and more advanced technologies of the Second Mint collided. I would guess that "normal" coining operations during this strenuous period were far from routine. I can imagine machinery being dismantled and hauled to the new location, items being boxed up, moved and so forth. No doubt some of the old wornout items were left behind and there was likely (as with any move of this type) an overall confusion at the new Mint perhaps leaving some items packed while others were repacked for a more thorough recheck later. Still, carelessness with the valuable dies used to strike coinage would have been a very abnormal practice, even during unfamiliar daily changes, as the dies were probably the most protected items of all the Mint's possessions. For example, during the years of bouts with Yellow Fever, when the Mint was forced to close, the common practice was to lock the dies in the vault of the First Bank of the United States where they would remain safe while the Mint sat idle. I imagine those same closely watched practices were in effect during the transfer of daily use items and machinery from the First to Second Mint.

So again, my reasons for telling you this first, is to place you in the correct mindset concerning the newly discovered die marriage that I now bring to your attention.

Over the last 35 years in my research and search for die varieties of Capped Bust Half-Dollars, I have, on occasion, picked up a nice Capped Bust Quarter, Dime or Half-Dime whenever the opportunity arose. Recently, while spending a sleepless night playing with some of those popular "baby busties" that I had purchased in the past, I started examining a new 1835 Half Dime that I had purchased just the day before from an area show. Nothing special about this one - just a nice 1835 Half-Dime in VF - with pretty toning. I retrieved my copy of "Federal Half Dimes 1792-1837" by Russ Logan and John McCloskey and quickly attributed it as being a LM-8.1 - Obverse #4 and Reverse DD. Next I checked my pocket inventory sheet and noted I already had the variety, so I then decided to check the grade of my piece using my enlarged scanned computer image set (something I've done out of habit for many years). Normally I use these images for study but also use them in a situation like this when trying to determine which of the two was higher grade and/or more eye pleasing to me. I quickly hit the keys and brought up my earlier 1835 LM-8.1 to the screen. My set piece was a much nicer AU, so I decided to keep it and use the new purchase as "trader bait".

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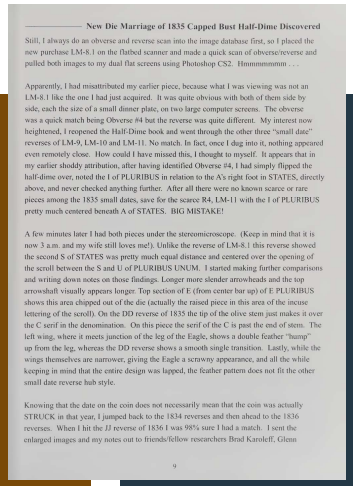

New Die Marriage of 1835 Capped Bust Half-Dime Discovered

Still, I always do an obverse and reverse scan into the image database first, so I placed the new purchase LM-8.1 on the flatbed scanner and made a quick scan of obverse/reverse and pulled both images to my dual flat screens using Photoshop CS2. Hmmmmmmm . . .

Apparently, I had misattributed my earlier piece, because what I was viewing was not an LM-8.1 like the one I had just acquired. It was quite obvious with both of them side by side, each the size of a small dinner plate, on two large computer screens. The obverse was a quick match being Obverse #4 but the reverse was quite different. My interest now heightened, I reopened the Half-Dime book and went through the other three "small date" reverses of LM-9, LM-10 and LM-11. No match. In fact, once I dug into it, nothing appeared even remotely close. How could I have missed this, I thought to myself. It appears that in my earlier shoddy attribution, after having identified Obverse #4, I had simply flipped the half-dime over, noted the I of PLURIBUS in relation to the A's right foot in STATES, directly above, and never checked anything further. After all there were no known scarce or rare pieces among the 1835 small dates, save for the scarce R4, LM-11 with the I of PLURIBUS pretty much centered beneath A of STATES. BIG MISTAKE!

A few minutes later I had both pieces under the stereomicroscope. (Keep in mind that it is now 3 a.m. and my wife still loves me!). Unlike the reverse of LM-8.1 this reverse showed the second S of STATES was pretty much equal distance and centered over the opening of the scroll between the S and U of PLURIBUS UNUM. I started making further comparisons and writing down notes on those findings. Longer more slender arrowheads and the top arrowshaft visually appears longer. Top section of E (from center bar up) of E PLURIBUS shows this area chipped out of the die (actually the raised piece in this area of the incuse lettering of the scroll). On the DD reverse of 1835 the tip of the olive stem just makes it over the C serif in the denomination. On this piece the serif of the C is past the end of stem. The left wing, where it meets junction of the leg of the Eagle, shows a double feather "hump" up from the leg, whereas the DD reverse shows a smooth single transition. Lastly, while the wings themselves are narrower, giving the Eagle a scrawny appearance, and all the while keeping in mind that the entire design was lapped, the feather pattern does not fit the other small date reverse hub style.

Knowing that the date on the coin does not necessarily mean that the coin was actually STRUCK in that year, I jumped back to the 1834 reverses and then ahead to the 1836 reverses. When I hit the JJ reverse of 1836 I was 98% sure I had a match. I sent the enlarged images and my notes out to friends/fellow researchers Brad Karoleff, Glenn

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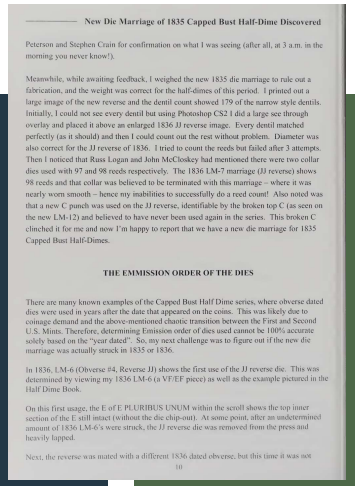

New Die Marriage of 1835 Capped Bust Half-Dime Discovered

Peterson and Stephen Crain for confirmation on what I was seeing (after all, at 3 a.m. in the morning you never know!).

Meanwhile, while awaiting feedback, I weighed the new 1835 die marriage to rule out a fabrication, and the weight was correct for the half-dimes of this period. I printed out a large image of the new reverse and the denti count showed 179 of the narrow style dentils. Initially, I could not see every dentil but using Photoshop CS2 I did a large see through overlay and placed it above an enlarged 1836 JJ reverse image. Every dentil matched perfectly (as it should) and then I could count out the rest without problem. Diameter was also correct for the JJ reverse of 1836. I tried to count the reeds but failed after 3 attempts. Then I noticed that Russ Logan and John McCloskey had mentioned there were two collar dies used with 97 and 98 reeds respectively. The 1836 LM-7 marriage (JJ reverse) shows 98 reeds and that collar was believed to be terminated with this marriage – where it was nearly worn smooth – hence my inabilities to successfully do a reed count! Also noted was that a new C punch was used on the JJ reverse, identifiable by the broken top C (as seen on the new LM-12) and believed to have never been used again in the series. This broken C clinched it for me and now I'm happy to report that we have a new die marriage for 1835 Capped Bust Half-Dimes.

THE EMMISSION ORDER OF THE DIES

There are many known examples of the Capped Bust Half Dime series, where obverse dated dies were used in years after the date that appeared on the coins. This was likely due to coinage demand and the above-mentioned chaotic transition between the First and Second U.S. Mints. Therefore, determining Emission order of dies used cannot be 100% accurate solely based on the "year dated". So, my next challenge was to figure out if the new die marriage was actually struck in 1835 or 1836.

In 1836, LM-6 (Obverse #4, Reverse JJ) shows the first use of the JJ reverse die. This was determined by viewing my 1836 LM-6 (a VF/EF piece) as well as the example pictured in the Half Dime Book.

On this first usage, the E of E PLURIBUS UNUM within the scroll shows the top inner section of the E still intact (without the die chip-out). At some point, after an undetermined amount of 1836 LM-6's were struck, the JJ reverse die was removed from the press and heavily lapped.

Next, the reverse was mated with a different 1836 dated obverse, but this time it was not

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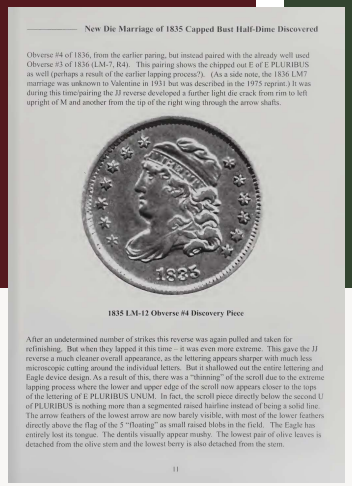

New Die Marriage of 1835 Capped Bust Half-Dime Discovered

Obverse #4 of 1836, from the earlier paring, but instead paired with the already well used Obverse #3 of 1836 (LM-7, R4). This pairing shows the chipped out E of E PLURIBUS as well (perhaps a result of the earlier lapping process?). (As a side note, the 1836 LM7 marriage was unknown to Valentine in 1931 but was described in the 1975 reprint.) It was during this time/pairing the JJ reverse developed a further light die crack from rim to left upright of M and another from the tip of the right wing through the arrow shafts.

1835 LM-12 Obverse #4 Discovery Piece

After an undetermined number of strikes this reverse was again pulled and taken for refinishing. But when they lapped it this time – it was even more extreme. This gave the JJ reverse a much cleaner overall appearance, as the lettering appears sharper with much less microscopic cutting around the individual letters. But it shallowed out the entire lettering and Eagle device design. As a result of this, there was a "thinning" of the scroll due to the extreme lapping process where the lower and upper edge of the scroll now appears closer to the tops of the lettering of E PLURIBUS UNUM. In fact, the scroll piece directly below the second U of PLURIBUS is nothing more than a segmented raised hairline instead of being a solid line. The arrow feathers of the lowest arrow are now barely visible, with most of the lower feathers directly above the flag of the 5 "floating" as small raised blobs in the field. The Eagle has entirely lost its tongue. The dentils visually appear mushy. The lowest pair of olive leaves is detached from the olive stem and the lowest berry is also detached from the stem.

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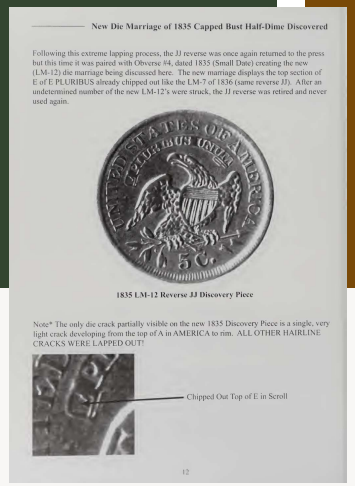

New Die Marriage of 1835 Capped Bust Half-Dime Discovered

Following this extreme lapping process, the JJ reverse was once again returned to the press but this time it was paired with Obverse #4, dated 1835 (Small Date) creating the new (LM-12) die marriage being discussed here. The new marriage displays the top section of E of E PLURIBUS already chipped out like the LM-7 of 1836 (same reverse JJ). After an undetermined number of the new LM-12's were struck, the JJ reverse was retired and never used again.

1835 LM-12 Reverse JJ Discovery Piece

Note* The only die crack partially visible on the new 1835 Discovery Piece is a single, very light crack developing from the top of A in AMERICA to rim. ALL OTHER HAIRLINE CRACKS WERE LAPPED OUT!

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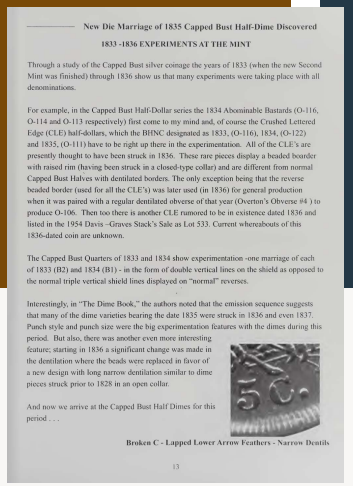

New Die Marriage of 1835 Capped Bust Half-Dime Discovered

1833 -1836 EXPERIMENTS AT THE MINT

Through a study of the Capped Bust silver coinage the years of 1833 (when the new Second Mint was finished) through 1836 show us that many experiments were taking place with all denominations.

For example, in the Capped Bust Half-Dollar series the 1834 Abominable Bastards (O-116, O-114 and O-113 respectively) first come to my mind and, of course the Crushed Lettered Edge (CLE) half-dollars, which the BHNC designated as 1833, (O-116), 1834, (O-122) and 1835, (O-111) have to be right up there in the experimentation. All of the CLE's are presently thought to have been struck in 1836. These rare pieces display a beaded boarder with raised rim (having been struck in a closed-type collar) and are different from normal Capped Bust Halves with dentilated borders. The only exception being that the reverse beaded border (used for all the CLE's) was later used (in 1836) for general production when it was paired with a regular dentilated obverse of that year (Overton's Obverse #4) to produce O-106. Then too there is another CLE rumored to be in existence dated 1836 and listed in the 1954 Davis –Graves Stack's Sale as Lot 533. Current whereabouts of this 1836-dated coin are unknown.

The Capped Bust Quarters of 1833 and 1834 show experimentation -one marriage of each of 1833 (B2) and 1834 (B1) - in the form of double vertical lines on the shield as opposed to the normal triple vertical shield lines displayed on "normal" reverses.

Interestingly, in "The Dime Book," the authors noted that the emission sequence suggests that many of the dime varieties bearing the date 1835 were struck in 1836 and even 1837. Punch style and punch size were the big experimentation features with the dimes during this period. But also, there was another even more interesting feature; starting in 1836 a significant change was made in the dentilation where the beads were replaced in favor of a new design with long narrow dentilation similar to dime pieces struck prior to 1828 in an open collar.

And now we arrive at the Capped Bust Half Dimes for this period . . .

Broken C - Lapped Lower Arrow Feathers - Narrow Dentils

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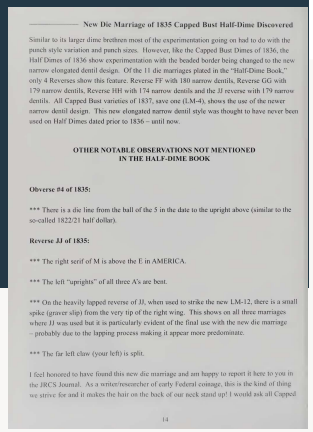

New Die Marriage of 1835 Capped Bust Half-Dime Discovered

Similar to its larger dime brethren most of the experimentation going on had to do with the punch style variation and punch sizes. However, like the Capped Bust Dimes of 1836, the Half Dimes of 1836 show experimentation with the beaded border being changed to the new narrow elongated dentil design. Of the 11 die marriages plotted in the "Half-Dime Book," only 4 Reverses show this feature. Reverse FF with 180 narrow dentils, Reverse GG with 179 narrow dentils, Reverse HH with 174 narrow dentils and the JJ reverse with 179 narrow dentils. All Capped Bust varieties of 1837, save one (LM-4), shows the use of the newer narrow dentil design. This new elongated narrow dentil style was thought to have never been used on Half Dimes dated prior to 1836 – until now.

OTHER NOTABLE OBSERVATIONS NOT MENTIONED IN THE HALF-DIME BOOK

Obverse #4 of 1835:

*** There is a die line from the ball of the 5 in the date to the upright above (similar to the so-called 1822/21 half dollar).

Reverse JJ of 1835:

*** The right serif of M is above the E in AMERICA.

*** The left "uprights" of all three A's are best.

*** On the heavily lapped reverse of JJ, when used to strike the new LM-12, there is a small spike (graver slip) from the very tip of the right wing. This shows on all three marriages where JJ was used but it is particularly evident of the final use with the new die marriage – probably due to the lapping process making it appear more predominate.

*** The far left claw (your left) is split.

I feel honored to have found this new die marriage and am happy to report it here to you in the JRCS Journal. As a writer/researcher of early Federal coinage, this is the kind of thing we strive for and it makes the hair on the back of our neck stand up! I would ask all Capped

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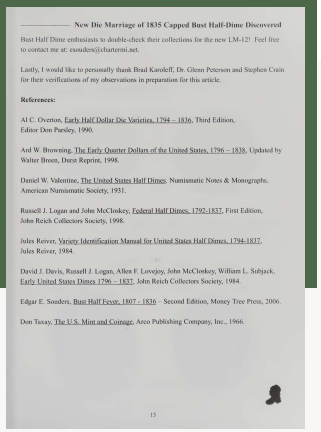

New Die Marriage of 1835 Capped Bust Half-Dime Discovered

Bust Half Dime enthusiasts to double-check their collections for the new LM-12! Feel free to contact me at: esouders@chartermi.net.

Lastly, I would like to personally thank Brad Karoleff, Dr. Glenn Peterson and Stephen Crain for their verifications of my observations in preparation for this article.

References:

Al C. Overton, Early Half Dollar Die Varieties, 1794 – 1836, Third Edition, Editor Don Parsley, 1990.

Ard W. Browning, The Early Quarter Dollars of the United States, 1796 – 1838, Updated by Walter Breen, Durst Reprint, 1998.

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Russell J. Logan and John McCloskey, Federal Half Dimes, 1792-1837, First Edition, John Reich Collectors Society, 1998.

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David J. Davis, Russell J. Logan, Allen F. Lovejoy, John McCloskey, William L. Subjack, Early United States Dimes 1796 – 1837, John Reich Collectors Society, 1984.

Edgar E. Souders, Bust Half Fever, 1807 - 1836 – Second Edition, Money Tree Press, 2006.

Don Taxay, The U.S. Mint and Coinage, Arco Publishing Company, Inc., 1966.

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https://nnp.wustl.edu/library/book/529787

THE 1835 LM-12 IS STILL VERY SCARCE.

THIS MS65 SURFACED IN 2024.

BY FAR THE BEST, IT'S A $60K COIN.

Interesting story: this coin last appeared publicly at the Bowers & Merena Walter H. Childs sale in 1999 as a "small date/large 5c."

After the 2007 discovery, an observant JRCS member "retro-attributed" it in the 1999 catalog.

That kind of **knowledge is power.**

Imaged by Heritage Auctions, HA.com

https://coins.ha.com/itm/bust-half-dimes/1835-h10c-small-date-large-5c-v-12-lm-12-high-r7-ms65-pcgs-pcgs-501413-/a/1374-4419.s?ic4=ListView-ShortDescription-071515

A NEW DIE MARRIAGE ASSERTS ITS EXISTENCE

AND GETS A WRITE-UP IN THE NOVEMBER 2021 JR JOURNAL

NEW DISCOVERY

I am grateful to have been chosen to announce a more recent discovery by the Iowa collector. This new discovery means you can start looking for AT LEAST one new die remarriage! The Iowa collector found a holed 1830 half dime with a retained cud on the reverse over NIT of UNITED. This type of cud is normally associated with another die marriage that also used Reverse L, the 1831 LM-1 die marriage. Take a look at the coin here:

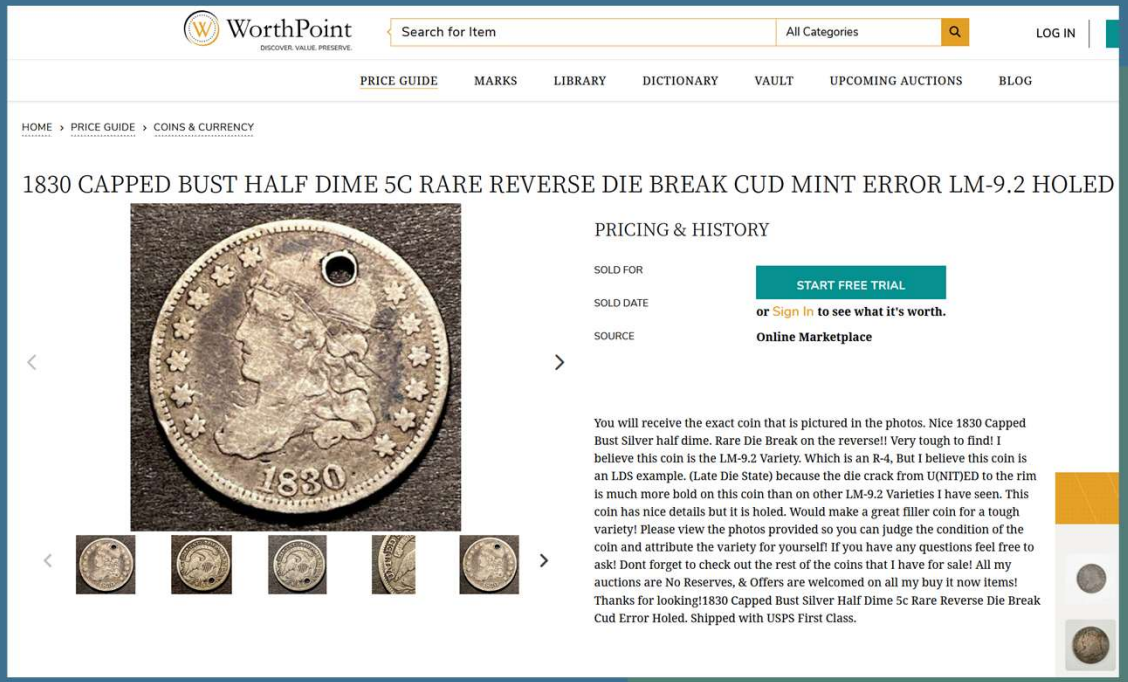
Clearly, this must be a new remarriage. For now, we are calling this the 1830 LM-9.3. However, the research must not end here. There is likely at least *one additional remarriage* that needs to be described too! If one examines enough 1831 LM-1.3 half dimes, one notices there are early die state examples that show a crack at NIT of UNITED, and there are later die state examples that show a later die state cud than the one featured above on the 1830 LM-9.3. So perhaps the numbering for the 1831 LM-1 remarriages should include LM-1.1, LM-1.2, LM-1.3, and LM-1.4! Think about it: just when you thought it was a challenge to collect 123 die marriages and remarriages, it will be an even greater undertaking to assemble at least 125! Certainly, more research needs to be done. Further, I recognize that we don't always incorporate the results of research into our collecting and "categorizing" goals. For example, years ago I illustrated that there may be no distinction between 1829 LM-13.1 and LM-13.2, yet we still designate the die marriage this way. So it may take YEARS before the 1830 LM-9 and 1831 LM-1 remarriages achieve wide recognition amongst the collector base and become sorted out.

This article was meant to be the starting point of the discussion on the newly-discovered remarriage. It is my sincere hope that this article spurs collectors to look for additional examples and to compare the die state shown on this coin to their 1831 LM-1.3 half dimes to see if we truly need to further reassess the remarriage numbering for the 1830 LM-9 AND the 1831 LM-1.

THE 1830 LM-9.3 WAS FORMALLY ANNOUNCED IN THE JRJ BY RICHARD MEANEY

https://nnp.wustl.edu/library/book/646691

THIS UNIQUE COIN WAS THE 2023 JRJ COVER GIRL



https://nnp.wustl.edu/library/book/646697

MY FIRST "DISCOVERY"

An 1835 LM-3 with mismatched photos caught my eye – from my hotel room at the ANA, August 2023.

I was (temporarily) the proud discoverer of a new Capped Bust Half Dime die marriage

Bikergeek Posts: **585** ★★★★★ November 8, 2023 3:49PM in U.S. Coin Forum

On August 10, 2023, in a hotel room in Pittsburgh, I was surfing coin dealer websites and auction houses from my laptop. It was my last evening at the ANA's World's Fair of Money. I was looking through my scores of bookmarks in a routine I call "running the jewels," seeking coins I need or want for my capped bust half dime passion. Across the room, my roomie, Dr. Glenn Peterson – numismatist/author/expert/friend – was poring over some numismatic tome or treasure. (And before I go any further, let me just say what a privilege it is to hang out with Glenn for 3 days at a major coin show! "Gentleman and a scholar" is overused but supremely fitting here!)

One of the lots from an unknown/untried auction house caught my eye. I won't name them here. The pics below show the obverse and reverse of an 1835 half dime. Obverse 2 is easy to spot: the large blocky 8 that looks taller than the fancy 8 on the other two large-date obverses that year. Obverse 2 is known only on one die marriage; paired with reverse AA (large 5c, S1 close to scroll) it comprises LM-3. BUT WAIT: this coin has a small 5c!

https://forums.collectors.com/discussion/1097340/i-was-temporarily-the-proud-discoverer-of-a-new-capped-bust-half-dime-die-marriage

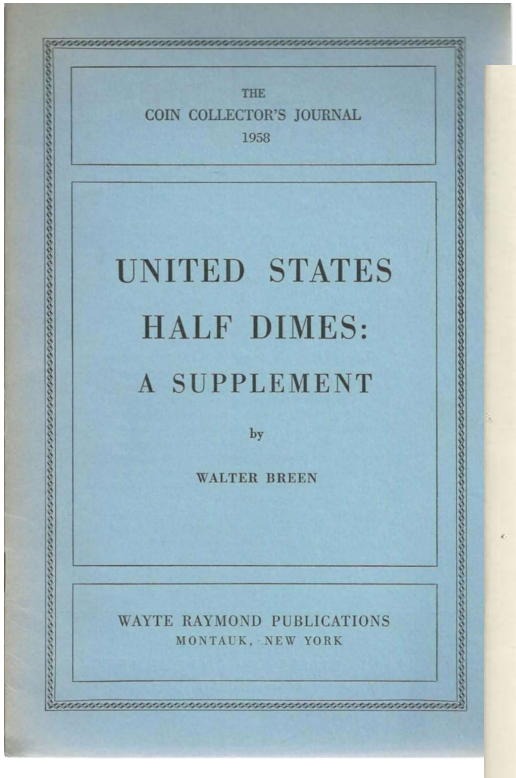
MY SECOND "DISCOVERY"

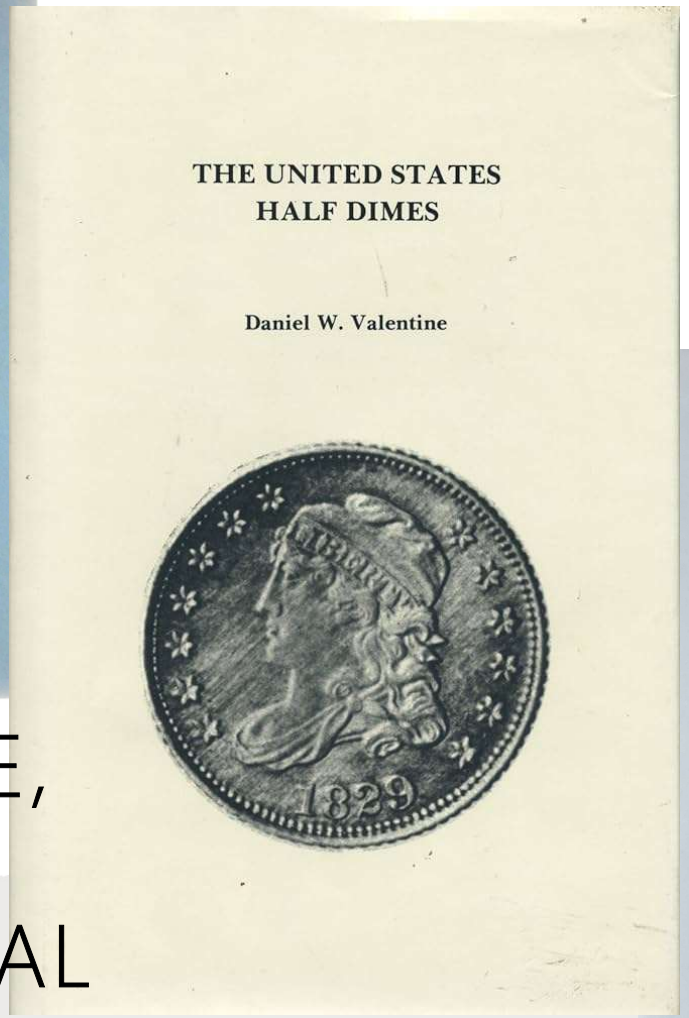
Reverse V was never paired with an 1833 Obverse!

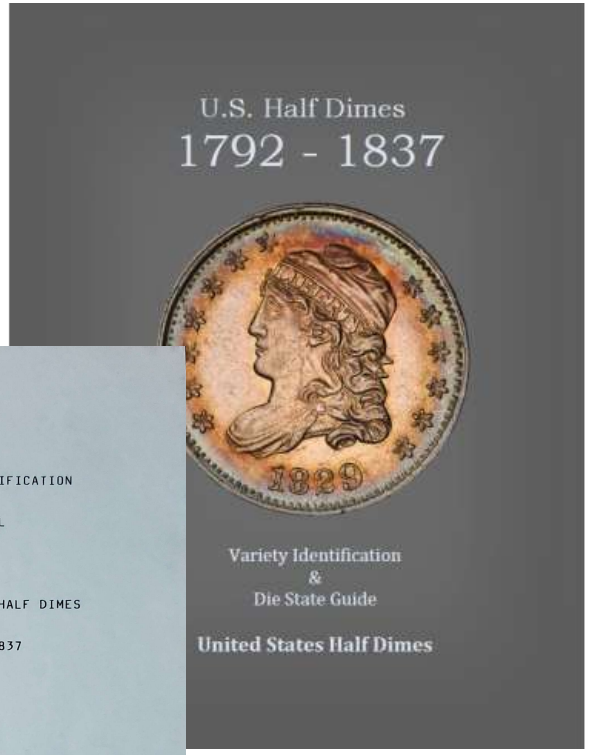
https://forums.collectors.com/discussion/1111650/capped-bust-half-dime-attribution-challenge-february-2025

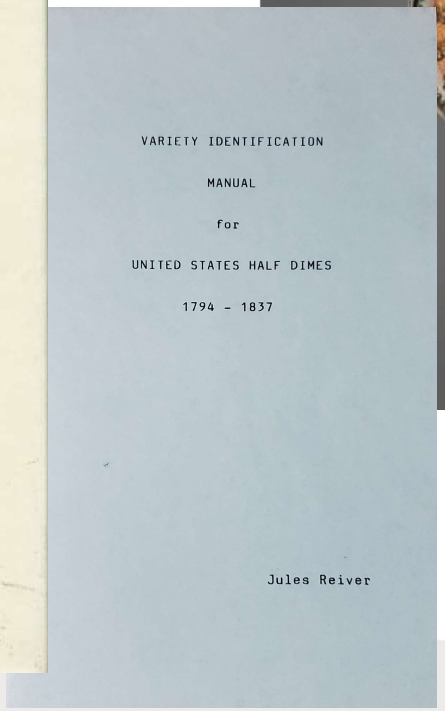
SO I KEPT MY NOSE TO THE GRINDSTONE…
MY EAR TO THE GROUND…
MY EYES WIDE OPEN…


AND STAYED
UP ON THE
LITERATURE

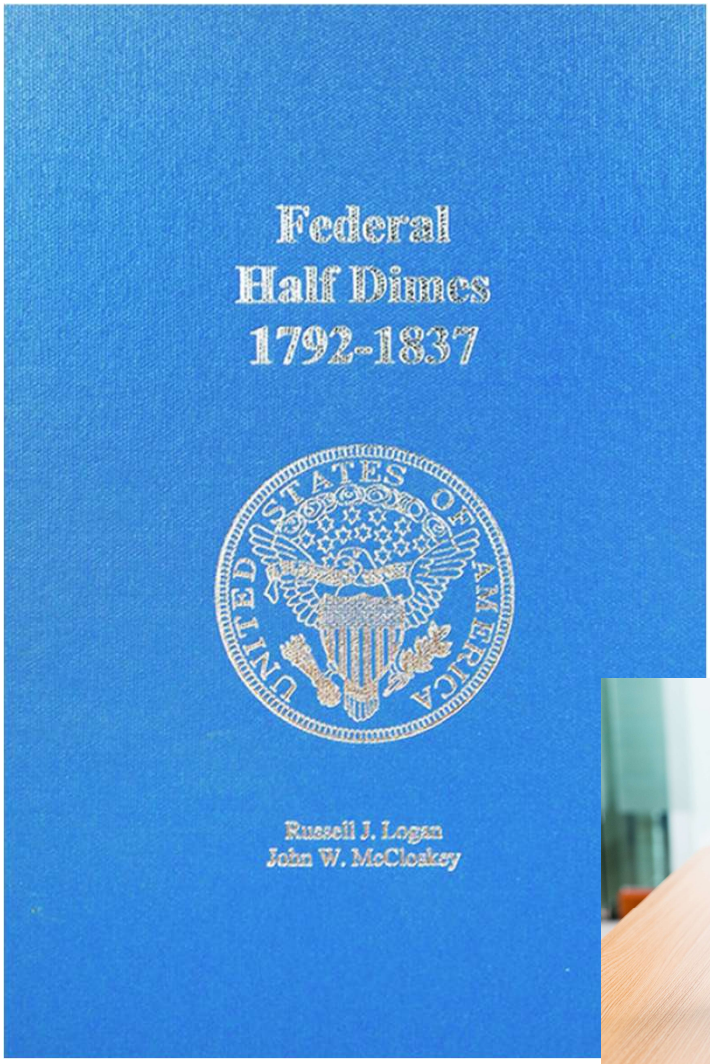








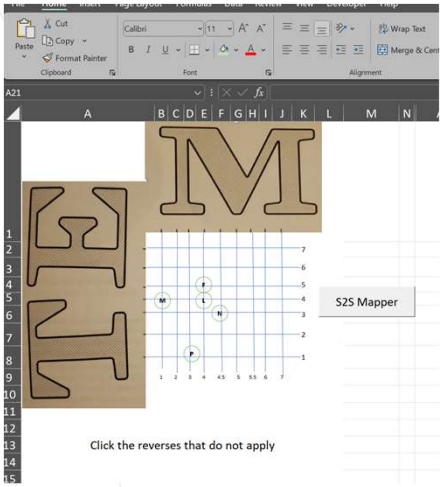
VALENTINE, BREEN, REIVER, ET AL

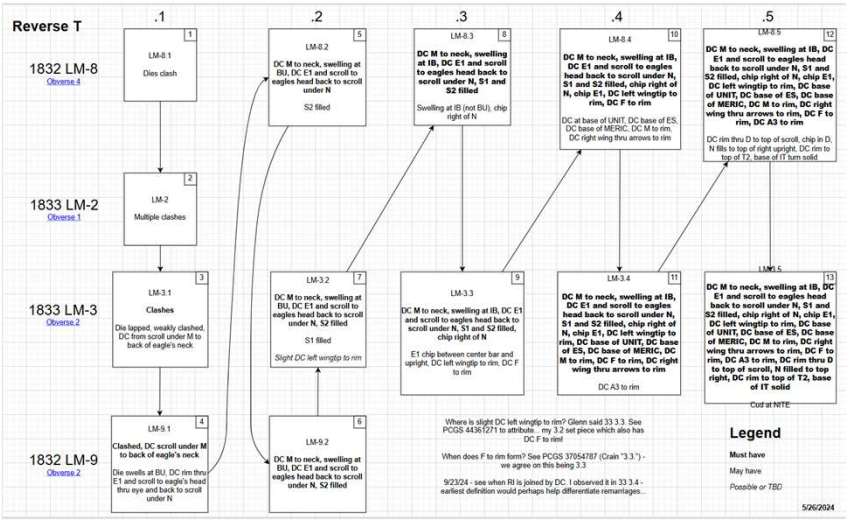


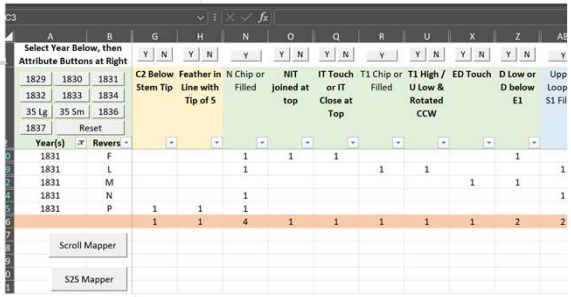
FEDERAL HALF DIMES 1792-1837

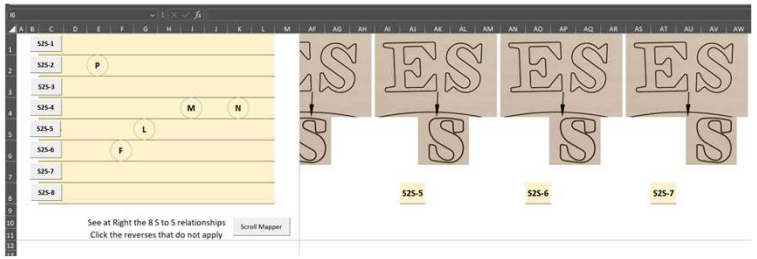
BY RUSSELL J. LOGAN AND JOHN W. MCCLOSKEY

AND UPDATED MY OWN DIAGNOSTIC TOOLS









AND THEN A NEWLY LISTED COIN WITH NO PHOTO INSPIRED ME TO LOOK BACK TO HERITAGE, 2004…

LOT #6074 | Jump to Lot GO

SOLD ON SEP 9, 2004 FOR: $437.00

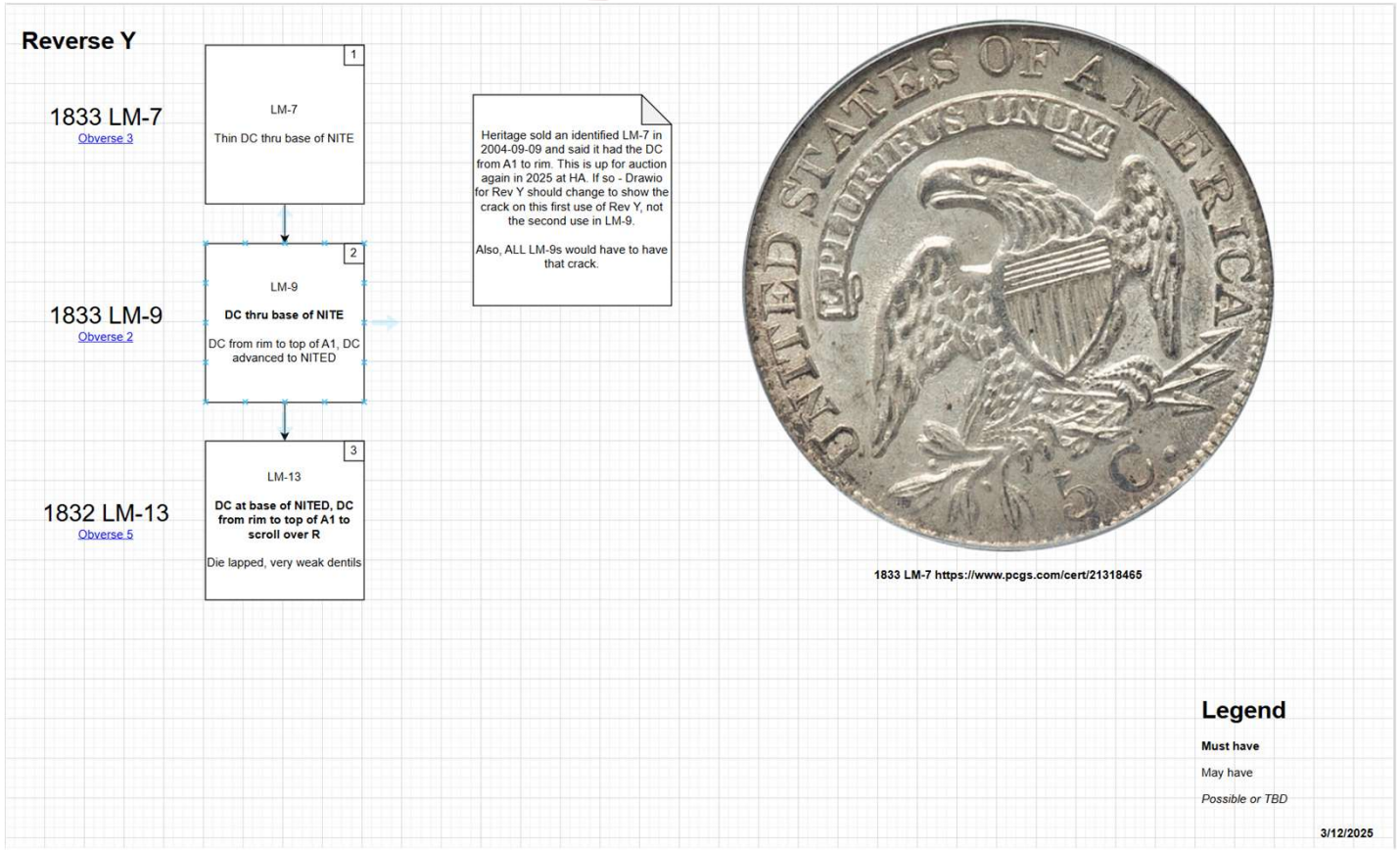
1833 H10C MS62 PCGS. V-5, LM-7, R.2. A nicely struck ...

Imaged by Heritage Auctions, HA.com

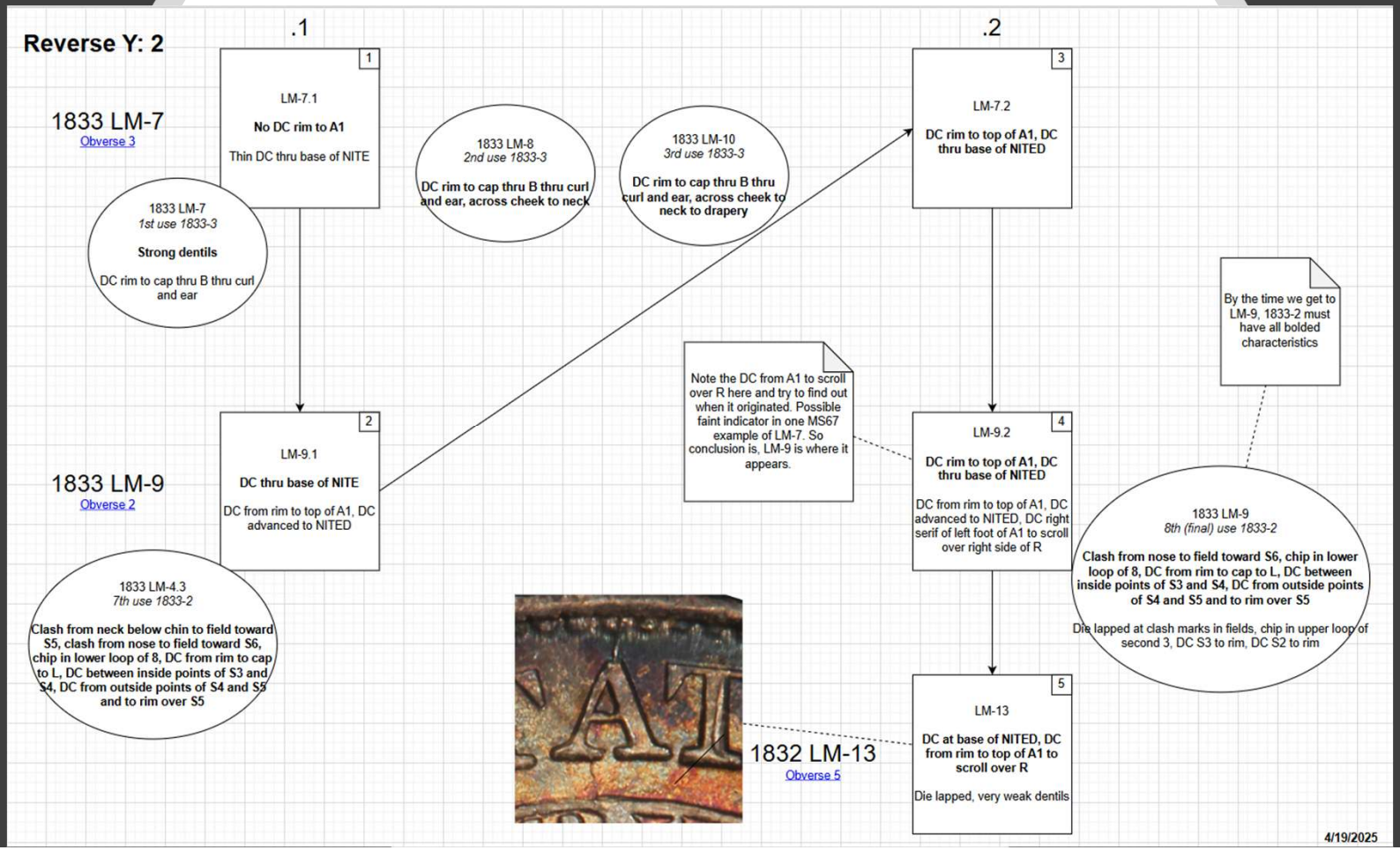
1833 H10C MS62 PCGS. V-5, LM-7, R.2. A NICELY STRUCK PEARL-GRAY HALF DIME THAT HAS REASONABLE LUSTER AND NO RELEVANT ABRASIONS. A DIE CRACK FROM THE TOP OF THE A IN STATES TO THE RIM IS UNMENTIONED IN THE LOGAN-MCCLOSKEY REFERENCE.

https://coins.ha.com/itm/bust-half-dimes/1833-h10c-ms62-pcgs-v-5-lm-7-r2-a-nicely-struck-pearl-gray-half-dime-that-has-reasonable-luster-and-no-relevant-abrasions-a-die-crack/a/355-6074.s?ic4=ListView-ShortDescription-071515

DIE DETERIORATION CHART
REVERSE Y (ORIGINAL)



DIE DETERIORATION CHART REVERSE Y (RESEARCH)



CURRENT VS. POSSIBLE (RE)MARRIAGE PROGRESSION

	1st Use	2nd Use	3rd Use	4th Use	5th Use
Current	1833 LM-7	1833 LM-9	1832 LM-13	--	--

	1st Use	2nd Use	3rd Use	4th Use	5th Use
#1	1833 LM-7.1	1833 LM-9.1	1833 LM-7.2	1833 LM-9.2	1832 LM-13
#2	1833 LM-7.1	1833 LM-9	1833 LM-7.2	1832 LM-13	--
#3	1833 LM-9.1	1833 LM-7	1833 LM-9.2	1832 LM-13	--
#4	1833 LM-9.1	1833 LM-7.1	1833 LM-9.2	1833 LM-7.2	1832 LM-13

1833 LM-9 DEVELOPS A CRACK FROM A TO SCROLL THAT IS PRESENT ON ALL 1832 LM-13S – SO LM-9 IS SECOND TO LAST

	1st Use	2nd Use	3rd Use	4th Use	5th Use
#1	1833 LM-7.1	1833 LM-9.1	1833 LM-7.2	1833 LM-9.2	1832 LM-13
~~#2~~	~~1833 LM-7.1~~	~~1833 LM-9~~	~~1833 LM-7.2~~	~~1832 LM-13~~	~~--~~
#3	1833 LM-9.1	1833 LM-7	1833 LM-9.2	1832 LM-13	--
~~#4~~	~~1833 LM-9.1~~	~~1833 LM-7.1~~	~~1833 LM-9.2~~	~~1833 LM-7.2~~	~~1832 LM-13~~

OPTIONS 1 AND 3 BOTH INDICATE AN LM-9 REMARRIAGE

1832 LM-13 IS LAST (PER L&M – AND DEMONSTRABLY)

	1st Use	2nd Use	3rd Use	4th Use	5th Use
#1	1833 LM-7.1	1833 LM-9.1	1833 LM-7.2	1833 LM-9.2	1832 LM-13
#3	1833 LM-9.1	1833 LM-7	1833 LM-9.2	1832 LM-13	--

BUT WHICH WAS FIRST: LM-7 OR LM-9?

There are contradictions in the book:

- **In LM-7** (p. 240): "Thin die crack ***forms*** through the base of NITE."
- **In LM-9** (p. 242): "Small die crack ***forms*** at the base of NITED."

Both show a "near-pristine" state ***as far as I've observed…***

IS THERE PROOF OF EITHER LM-7 OR LM-9 BEING THE FIRST USER OF REVERSE Y?

JULY 2025 JR JOURNAL – MY ARTICLE IS OUT!

1833 LM-7 and LM-9: Undocumented Remarriages

Striving to upgrade my Capped Bust half dime set, I keep a sharp eye peeled. As new facts come to light, I update my documentation, the core of which came from the book "Federal Half Dimes 1792-1837" by Russ Logan and John McCloskey ("L&M"). I note new findings, fix minor errata, chart die progressions, and share information with fellow collectors.

A recent Heritage Auctions (HA) listing for a nice MS62 1833 LM-7 led me to review lot #355 in HA's 2004 September Long Beach Signature Sale. The cataloger wrote this introduction: "1833 H10C MS62 PCGS. V-5. 1 M-7. R 7. *A nicely struck pearl-gray* Half Dime that has reasonable luster and no relevant abrasions. A die crack from the top of the A in STATES to the rim is **unmentioned in the Logan-McCloskey reference**." (*Emphasis mine*).

This LM-7 crack was news to me! I set out to chart this change, but first, due diligence required me to find the crack in LM-7 and then to verify that all subsequent uses of Reverse Y had the crack. Die cracks, once formed, are permanent and do not get removed or lapped away. Unlike, for example, die clashes, cracks are a reliable indicator of die deterioration and do not appear and disappear between marriages.

L&M say that **Reverse Y** was used in three marriages in this order: 1833 LM-7, 1833 LM-9, and 1832 LM-13. Searching the web, I found 1833 LM-7s *with and without this A1-to-rim crack*, and 1833 LM-9s *with and without the crack*. I recognized that **there must be at least one die remarriage among these two 1833 marriages.**

A Die Remarriage

"Die state analysis of many Capped Bust half dimes reveals that an obverse-reverse die pair was frequently reunited after one or both of the dies were used to strike coins with different mates. In other words, a die remarriage occurs if the same obverse-reverse die pair is reunited in the screw press after either of the dies was used to strike another die marriage. Because one screw press was used exclusively for the production of half dollars, there was a need for continual set-up and break-down of the dies and periphery equipment to satisfy the demands for the remaining copper, gold, and silver denominations coined at the Mint." – **L&M**

The Current State

L&M describe this Reverse Y progression:	**Therefore, we expect to encounter:**
1. LM-7 *forms*[1] a thin die crack through the base of NITE.	A. LM-7 with no reverse cracks
2. LM-9 *forms* a DC from rim to top of A1 (the A in STATES). Also, "a small die crack *forms* at the base of NITED." We will explore this further below.	B. LM-7 with crack under NITE C. LM-9 with crack under NITE D. LM-9 with crack under NITE and crack A1 to rim
3. 1832 LM-13 *has*[2] a DC from rim to A1 which proceeds to the scroll over R, a DC at base of NITED, and severe lapping with weak dentils.	E. LM-9 with crack under NITED and crack A1 to rim F. 1832 LM-13 with crack under NITED and crack A1 to rim to scroll over R

Since this 1833 LM-7 deviates from these expectations, I undertook a deep dive. I wrote down my research questions, started downloading images, and devised a matrix to record and sort the die progressions for Reverse Y. In all questions, I assume that the L&M work is accurate until demonstrated otherwise; the book is 27 years old and has held up well.

Research Questions

Q1 – On Rev Y, when does the crack from rim to top of A1 occur?

Based on L&M's emission order for Reverse Y:

	1st Use	2nd Use	3rd Use	4th Use	5th Use
Current	1833 LM-7	1833 LM-9	1832 LM-13	--	--

If the A1 to rim crack occurred during LM-7, then **all** instances of LM-9 and 1832 LM-13 should show it. If the A1 to rim crack occurred during LM-9, then **no** instances of LM-7 should show it.

Observation: There are LM-7s with and without the crack from rim to A1, and there are LM-9s with and without that crack.

[1] L&M say: "The working die continued to degenerate during the production of a specific die marriage. This dynamic degradation is documented in the **present tense.** A description such as *Die crack forms from dentils to top of TS, or Die chip develops within the upper loop of S2* describes a die failure that occurred during the striking of that die marriage. Every effort has been made to chronologically list these die defects."

[2] L&M assert that 1832 LM-13 has the DC from rim to A1 to scroll over R – but don't tell us when it *forms*. This article addresses that.

Conclusions:

1. The crack from rim to A1 **occurs in LM-7** ***and*** **LM-9**.
2. The expected progression A through F above is not accurate.
3. There is a remarriage to one (or both) 1833 LM-7 and LM-9.

Q2 – On Rev Y, when does the crack from the foot of A1 to scroll occur?

L&M do not tell us when the crack from A1 to the scroll over R forms – late in 1833 LM-9 or during 1832 LM-13. If it occurs during 1833 LM-9, then **all** instances of 1832 LM-13 should show it. If it occurs during 1832 LM-13, then **no** instances of 1833 LM-9 should show it.

Figure 1: 1832 LM-13 detail of A1 cracks

Observations:

- There are LM-9s with and without the crack from A1 to scroll as shown in the PCGS/CAC MS67 in Figure 1, PCGS 24864501.

Conclusions:

1. The crack from the right side of the left foot of A1 to the scroll over R **forms during 1833 LM-9**.
2. We **accept** L&M's assertion that 1832 LM-13 is the final use of Reverse Y.

Q3 – Can we confidently chart a new progression for Rev Y coins?

We now have a responsibility to propose a new progression. We have more high-quality digital images than the authors had in 1998. We must look at the entire die progression anew to confirm or refute previous findings.

Given that there are LM-7 and LM-9 each **with** and **without** the crack from A1 to rim, and that we acknowledge 1832 LM-13 as the final use of Reverse Y, there are four options:

	1st Use	2nd Use	3rd Use	4th Use	5th Use
#1	1833 LM-7.1	1833 LM-9.1	1833 LM-7.2	1833 LM-9.2	1832 LM-13
#2	1833 LM-7.1	1833 LM-9	1833 LM-7.2	1832 LM-13	--
#3	1833 LM-9.1	1833 LM-7	1833 LM-9.2	1832 LM-13	--
#4	1833 LM-9.1	1833 LM-7.1	1833 LM-9.2	1833 LM-7.2	1832 LM-13

Observation: There are LM-9s with the crack from the foot of A1 to scroll, but ***no*** **LM-7s seen with that crack**. Thus, 1833 LM-9 must be the penultimate use of Reverse Y. That eliminates options 2 and 4, leaving 1 and 3—both of which indicate an LM-9 remarriage:

	1st Use	2nd Use	3rd Use	4th Use	5th Use
#1	1833 LM-7.1	1833 LM-9.1	1833 LM-7.2	1833 LM-9.2	1832 LM-13
~~**#2**~~	~~1833 LM-7.1~~	~~1833 LM-9~~	~~1833 LM-7.2~~	~~1832 LM-13~~	--
#3	1833 LM-9.1	1833 LM-7	1833 LM-9.2	1832 LM-13	--
~~**#4**~~	~~1833 LM-9.1~~	~~1833 LM-7.1~~	~~1833 LM-9.2~~	~~1833 LM-7.2~~	~~1832 LM-13~~

Conclusion:

1. **1833 LM-9 has a remarriage.** Diagnostics:
   a. **1833 LM-9.1** has no crack from A1 to rim.
   b. **1833 LM-9.2** has a crack from A1 to rim. (It also *forms* a crack from A1 to scroll over R).

We must explore LM-7 to filter the remaining two options.

Q4 – Which marriage saw the *first* use of Rev Y?

We accept L&M's assertion that the last use of Reverse Y was in 1832 LM-13. Confirming the **first use** of Reverse Y, if possible, will cement *our new die progression*.

Our progression table now has but two remaining possibilities. **If** the first use of Reverse Y is with an 1833 LM-7, then option #1 prevails. **If, however,** the first use is with an 1833 LM-9, then #3 prevails.

	1st Use	2nd Use	3rd Use	4th Use	5th Use
#1	1833 LM-7.1	1833 LM-9.1	1833 LM-7.2	1833 LM-9.2	1832 LM-13
#3	1833 LM-9.1	1833 LM-7	1833 LM-9.2	1832 LM-13	--

What do observations tell us? Unfortunately, there is not a simple answer. For example, L&M write these contradictory descriptions regarding Reverse Y:

- **In LM-7** (p. 240): "Thin die crack forms through the base of NITE."
- **In LM-9** (p. 242): "Small die crack forms at the base of NITED."

The use of "forms," as cited previously, indicates that a diagnostic appears during the minting of the marriage. Saying the crack "forms" under NITE in two places is an obvious error. I believe if L&M were trying to convey that the existing crack at NITE spread to the D in LM-9, they would have said "Crack at NITE extends to D." As written, their meaning is ambiguous.

I scrutinized coins for the NITE crack, as it is hard to discern in photos. Finding that one of the marriages *never* (or *always*) had the crack would have helped prove the first use of Rev Y.

However, like the crack from A1 to rim, I found LM-7s and LM-9s both *with* and *without* indications of this NITE crack. Since neither the A1 nor the NITE cracks establish a first use of Rev Y, I can neither confirm nor refute the authors' current order placing LM-7 first.

Conclusions:

1. Lacking evidence to contradict L&M, I **accept that LM-7 is first.**
2. Since we stipulated above that 1832 LM-13 is last, and LM-9 is second-to-last, that pinpoints Progression #1 as our Reverse Y progression.
3. **Thus, both LM-7 and LM-9 have remarriages: LM-7.1 & 7.2, and LM-9.1 & 9.2.**

I acknowledge that the discovery of *two* new remarriages (option #1) is less convenient than just *one* (option #3: LM-9.1 -> LM-7 -> LM-9.2). Reasonable people may say that the simpler solution with only one remarriage is preferred. But I ordered LM-7 first, and I am reluctant to overturn their precedent without evidence. A conversation should ensue among series specialists to finalize the emission order and remarriage(s).

	1st Use	2nd Use	3rd Use	4th Use	5th Use
	No Die Crack rim to A1	No Die Crack rim to A1	Die crack rim to A1	DC rim to A1; DC A1to scroll forms	DC rim to A1; DC A1 to scroll
#1	**1833 LM-7.1**	**1833 LM-9.1**	**1833 LM-7.2**	**1833 LM-9.2**	**1832 LM-13**

Q5 – Where does 1833 LM-8 fall in the emission order?

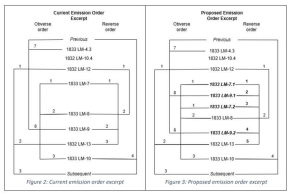


Figure 2: Current emission order excerpt

Figure 3: Proposed emission order excerpt

The ladder charts above show the order of use for the obverses (left) and reverses (right). Note that these are *not* the names of the dies; they are the emission order numbers. Figure 2 reveals that 1833 LM-7 and LM-8 share a die (which we know to be 1833 Obverse 3). Therefore, we must sort in LM-8 accurately. There is a (near-)bisecting die crack from rim through B down to drape on Obv 3 that forms in LM-7 and is seen in all instances of LM-8. But *in which remarriage of LM-7* does it form?

Figure 4: 1833 LM-7.2 with full obverse crack

Observation: The observed instances of LM-7.1 which lack the reverse die crack from A1 to rim *also* lack the 1833 Obverse 3 die cracks. The copies of LM-7.2, like the NGC/CAC MS67 image in Figure 4 taken from Stack's Bowers November 2012 Baltimore sale, show a progression of these die cracks from rim to cap to ear to neck.

Adding two remarriages means there are now five steps on the ladder chart where there were three. For reverse Y, they are steps 1 through 5. *Would we also see increments 1 through 5 in the steps for the obverses?* The answer is no. Per L&M's convention for marriages like 1829 LM-6 or 1830 LM-4, where remarriages were triggered by a "wandering" reverse die **but the obverse was "faithful,"** the ordinal number of the obverse remained the same for all remarriages. More plainly: 1829 LM-6.1, 6.2, and 6.3 are all shown as the **second use** of 1829 Obverse 4 (pp. 147-149). And 1830 LM-4.1 and 4.2 are both called the **second use** of 1830 Obverse 2 (pp. 174-175), although in LM-4.2 the authors clarify it is the second **"and final"** use.

Conclusions:

1. I place 1833 LM-8 after LM-7.2 in the emission order ladder.
2. I place LM-8 before LM-9 in deference to L&M's original order. *Since LM-8 and LM-9 share neither obverse nor reverse dies, there is no empirical way to show their emission order.*
3. LM-7.1 and LM-7.2 are both noted as the **first** use of 1833 Obv 3.
4. LM-9.1 and LM-9.2 are both noted as the **eighth** use of 1833 Obv 2, although LM-9.2 has the distinction of being "eighth and **final**."

The "New" Current State

I submit that there are remarriages for 1833 LM-7 and LM-9, and that they are positively identifiable by the absence or presence of the die crack from A1 to the rim. Figures 5 through 8 show the coins with closeups of A1 for, respectively, LM-7.1, LM-9.1, LM-7.2, and LM-9.2.

Figure 5: 1833 LM-7.1 MS63 PCGS 80588122

Figure 6: 1833 LM-9.1 MS66 PCGS 37113210

Figure 7: 1833 LM-7.2 MS63 PCGS 28769667

Figure 8: 1833 LM-9.2 MS64 PCGS 20463131

Closing Thoughts

There is more work to be done. The question of first use of Reverse Y should be settled (if not scientifically, at least politically). This will decide the existence of an LM-7 remarriage.

Obverse states, which I mention, but do not attempt to arrange here, should be documented and associated to the remarriages, as L&M do for every remarriage:

- For LM-7, the progression of the vertical die crack in 1833 Obv 3.
- For LM-9, an array of cracks and chips.

Rarity ratings should be estimated. L&M assigned R2 ratings to both 1833 marriages (501 to 1,250 coins extant), and the JRCS maintains the R2 estimate in its census, but I do not assign an R rating to these remarriages. I had no difficulty in finding examples of all four remarriages.

I intend to seek concurrence from the Capped Bust half dime community, and will conduct outreach via the JR Newsletter. You may contact me to express interest or share your thoughts via my link at the JRCS: https://jrcs.org/jrcs_contact.php or on the forums where my handle is "Bikergeek."

As to the 1833 LM-7 (PCGS/CAC 21318465) that incited this article: I call it 1833 LM-7.2. The A1 to rim crack is there, just as the HA cataloger told us in 2004.

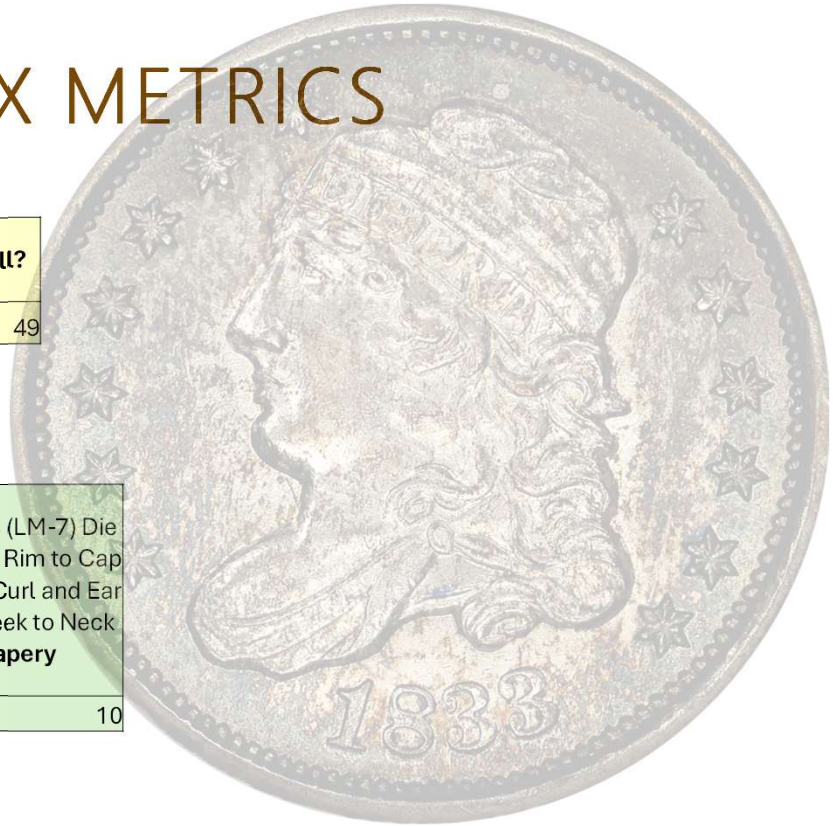
MY DECISION MATRIX

Unique # (do not change)	Year	Marriage	SortMarriage	New Name	Coin Link 1	Coin Link 2	TPG	Grade (needed for NGC Ctrl-L lookup)	Cert #	DC base of IT? *(Note 1)*	DC rim to A1?	DC base of ED? *(Note 2)*	DC A1 to Scroll?	Reverse WEIGHT	WEIGHT Factor (A1 only)	1833 Obv 3 (LM-7) Die State A: **DC Rim to Cap thru B thru Curl and Ear**	1833 Obv 3 (LM-7) Die State B: DC Rim to Cap thru B thru Curl and Ear **Across Cheek to Neck**	1833 Obv 3 (LM-7) Die State C: DC Rim to Cap thru B thru Curl and Ear Across Cheek to Neck **to Drapery**	WEIGHT LM-7 Obv	1833 Obv 2 (LM-9) Die State C: DC **star 3** to rim	1833 Obv 2 (LM-9) Die State E: **DC inner points of S3 - S**	1833 Obv 2 (LM-9) Die State F: **DC outer points of S4 - S**
1	1833	LM-7	7	LM-7.1	P53 Coinfacts		PCGS	53	41615698	0	0	0	0	0	0	0	0	0	0	n/a	n/a	n/a
2	1833	LM-7	7	LM-7.1	P50 Coinfacts		PCGS	50	27305838	0	0	0	0	0	0	0	0	0	0	n/a	n/a	n/a
81	1833	LM-7	7	LM-7.1	Ted		NGC	58	6881227-047		0		0	0	0	0	0	0	0	n/a	n/a	n/a
84	1833	LM-7	7	LM-7.1	Sean ANACS		ANACS	62	963110	0	0	0	0	0	0	0	0	0	0	n/a	n/a	n/a
7	1833	LM-7	7	LM-7.1	P58 Coinfacts	P58 HA	PCGS	58	27305839	0	0	0	0	0	0	1	0	0	1	n/a	n/a	n/a
77	1833	LM-9	9	LM-9.1	Ted		PCGS	50	18361310		0		0	0	0	n/a	n/a	n/a	#VALUE!	1	0	0
15	1833	LM-9	9	LM-9.1	N61 Stacks		NGC	61	4775034-001	0	0	0	0	0	0	n/a	n/a	n/a	#VALUE!	1	1	1
16	1833	LM-9	9	LM-9.1	N64 Stacks		NGC	64	?	0	0	0	0	0	0	n/a	n/a	n/a	#VALUE!	1	0	1
67	1833	LM-9	9	LM-9.1	PCGS 66		PCGS	66	37113210	0	0	0	0	0	0	n/a	n/a	n/a	#VALUE!	1	0	1
14	1833	LM-9	9	LM-9.1	P58 Coinfacts		PCGS	58	36812371	0	0	0	0	0	0	n/a	n/a	n/a	#VALUE!	0	1	1
52	1833	LM-9	9	LM-9.1	Raw 45 at GFRC		Raw	45	n/a	0	0	0	0	0	0	n/a	n/a	n/a	#VALUE!	1	1	1
18	1833	LM-9	9	LM-9.1	P58 Coinfacts		PCGS	58	12841792	0.5	0	0	0	0.5	0	n/a	n/a	n/a	#VALUE!	0	0	0
3	1833	LM-7	7	LM-7.1	NGC 58 Stacks ex Reiver	N58 HA ex Reiver	NGC	58	656408-018	1	0	0	0	1	0	0	0	0	0	n/a	n/a	n/a
4	1833	LM-7	7	LM-7.1	MS63 Stacks		?	63		1	0	0	0	1	0	0	0	0	0	n/a	n/a	n/a
6	1833	LM-7	7	LM-7.1	P63 Coinfacts Ted		PCGS	63	80588122	1	0	0	0	1	0	0	0	0	0	n/a	n/a	n/a
10	1833	LM-7	7	LM-7.1	P63 Coinfacts		PCGS	63	13450838	1	0	0	0	1	0	0	0	0	0	n/a	n/a	n/a
69	1833	LM-7	7	LM-7.1	Glenn		NGC	63	1721311-069	1	0	0	0	1	0	0	0	0	0	n/a	n/a	n/a
13	1833	LM-7	7	LM-7.1	P62 Coinfacts		PCGS	62	47486100	1	0	0	0	1	0	1	0	0	1	n/a	n/a	n/a

MY DECISION MATRIX METRICS

The more frequent the occurrence, the sooner it happened

Reverse Pickups:	**DC base of IT? *(Note 1)***	**DC rim to A1?**	**DC base of ED? *(Note 2)***	**DC A1 to Scroll?**
Sum:	111	90	57	49



Remember: obverses deteriorate too…

1833 LM-7 used 1833 Obverse 3

LM-7 Obverse Pickups:	1833 Obv 3 (LM-7) Die State A: **DC Rim to Cap thru B thru Curl and Ear**	1833 Obv 3 (LM-7) Die State B: DC Rim to Cap thru B thru Curl and Ear **Across Cheek to Neck**	1833 Obv 3 (LM-7) Die State C: DC Rim to Cap thru B thru Curl and Ear Across Cheek to Neck **to Drapery**
Sum:	19	16	10

1833 LM-9 used 1833 Obverse 2

LM-9 Obverse Pickups:	1833 Obv 2 (LM-9) Die State C: DC **star 3** to rim	1833 Obv 2 (LM-9) Die State E: **DC inner points of S3 - S4**	1833 Obv 2 (LM-9) Die State F: **DC outer points of S4 - S5**	1833 Obv 2 (LM-9) Die State G: **DC S5 to rim**	1833 Obv 2 (LM-9) Die State D: DC **star 2** to rim
Sum:	56	52	56	54	20

DIAGNOSTICS
(IF BOTH HAVE REMARRIAGES)

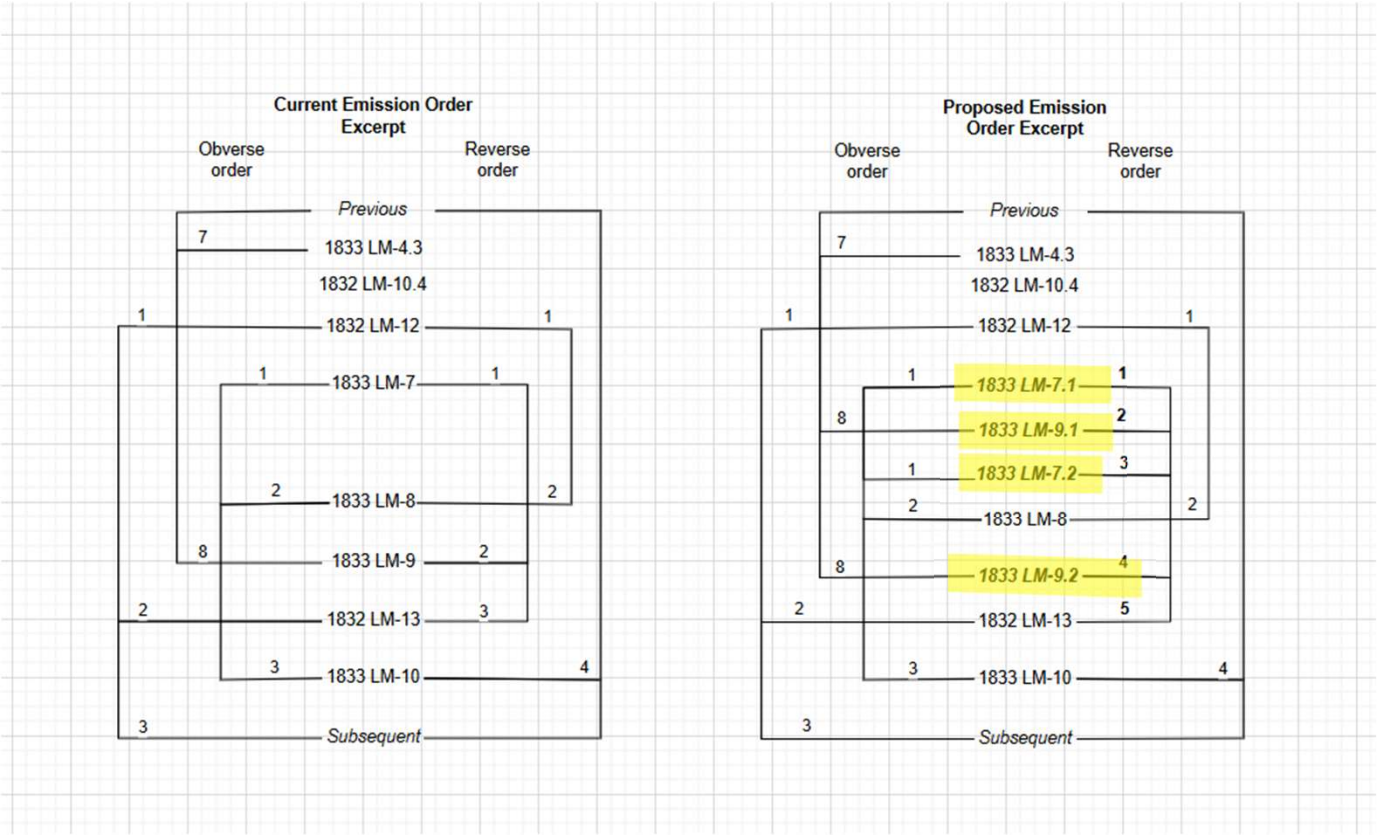
	1st Use	2nd Use	3rd Use	4th Use	5th Use
	No Die Crack rim to A1	No DC rim to A1	DC rim to A1	DC rim to A1; DC A1 to scroll forms	Crack rim to A1; DC A1 to scroll
#1	1833 LM-7.1	1833 LM-9.1	1833 LM-7.2	1833 LM-9.2	1832 LM-13

DIAGNOSTICS
(IF ONLY LM-9 HAS A REMARRIAGE)

	1st Use	2nd Use	3rd Use	4th Use
	No Die Crack rim to A1	Starts with no DC rim to A1 – DC rim to A1 *forms*	DC rim to A1; DC A1 to scroll *forms*	Crack rim to A1; DC A1 to scroll
#3	1833 LM-9.1	1833 LM-7	1833 LM-9.2	1832 LM-13

WHERE DO THEY FIT IN THE OVERALL EMISSION ORDER?

Logan and McCloskey created a ladder chart for ALL marriages and remarriages.



Numbers on lines are *not* the names of the dies; they are the emission order numbers

A CAPPED BUST HALF DIME WORKING GROUP

COULD:

- VALIDATE ASSUMPTIONS IN MY ARTICLE
- DECIDE WHETHER 1833 LM-7 IS FIRST (HAS REMARRIAGE)
- FINALIZE EMISSION ORDER LADDER CHART
- ESTIMATE RARITY
- LOOK AT PROPOSALS MADE BY OTHER AUTHORS
- DOCUMENT CORRECTIONS TO THE BOOK
- PUBLICLY HOST THE MASTER LIST (FROM THE CENSUS, BUT ONLY EVERY 4 YEARS)
- *YOUR IDEAS HERE…*

QUESTIONS?

(WHO WANTS TO BE PART OF A WORKING GROUP?)