1877-S Seated Dime Varieties

by

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The 1877-S dime has become my target for die variety analysis during the past year. With a mintage of 2.34 million pieces, this date attracted my attention because I felt that with patience I could expect to isolate numerous minor varieties for this issue. Maybe even a blundered date was waiting to be discovered and properly identified. And then there was always the quiet hope of finding an example of this date with the Type 1 reverse with a single flip of a coin.

In his "Encyclopedia of United States Liberty Seated Dimes", Kam Ahwash listed only two varieties for the 1877-S dime. Furthermore, this date is considered underrated by authors who have published information on the Seated dime series in the Gobrecht Journal. Survey reports on the dime series published by both McCloskey and Searcy in Collective Volume Number Two have indicated low frequency counts for this date. Brian Greer recently described the 1877-S dime as "one of the most challenging common dates to locate" in his recently published book on the dime series. Fortunately, with the help of Harry Smith, I was able to overcome this scarcity problem by locating a small hoard of 25 coins of this date ranging in grade from VG to EF. This significantly augmented the group of five pieces that I had already accumulated during the past four years.

Die Identification

The identification of With Drapery obverse die varieties typically uses the date placement as a major diagnostic point since all other obverse features are hubbed. Shifts in the placement of the 1 digit in the date with respect to the vertical lines in the obverse shield have been described by Ahwash and McCloskey. This shield position (SP) method utilizes an imaginary line to determine the position of the flag of the 1 in the date in relation to the vertical shield lines. This SP method was easy to use at a busy coin show but my study of the 1877-S dimes revealed that it lacked the ability to differentiate subtle date placement shifts. The distance between pairs of vertical shield lines provides simply too much opportunity for measurement error.

During past conversations with Brian Greer, an alternative approach to the SP method for the determination of the date placement has been discussed. Brian has recommended that the measurement on the 1 digit be shifted from the shield stripes to the denticles below the date. A description of Brian's method will be given below with photographs utilized for clarification.

The Denticle Ruler Identification Method

The denticle ruler (DR) identification method is a two step process. First, the collector sights an imaginary vertical line from the point of the shield down to the denticle directly below it. This denticle now becomes the point of reference for

Denticle Ruler Measurement Technique DR-1R

measurements and is assigned a 0 position. Denticles immediately to the right of this reference denticle are numbered 1, 2, 3, etc. Denticles immediately to the left of the reference denticle are given position assignments -1, -2, -3, etc. These numbered denticles now act as a ruler for date placement measurements. The 1 in the date can then be measured by establishing the placement of the left foot of the 1 with respect to the numbered denticle. Secondly, measurement accuracy can be improved by subdividing the denticles into left, center and right subpoints. A position where the left base of the 1 is centered directly between two denticles can also be utilized for further refinement. The classification of date placement would then take the form of DR-1R for a left foot position over the right section of the 1 denticle. The label DR-0B1 signifies a left foot position between the 0 and 1 denticles. A little practice is needed to become proficient with this measurement but once it is mastered, this tool becomes very useful in die variety analysis.

In Table 1 I have listed the various obverse dies identified while studying my small hoard of 1877-S dimes. Overall, a total of 11 different obverses are listed with their attributes. The Ahwash designations of A-1, A-2, etc. have been used to identify each new obverse die. The obverse die attributes for shield position, date placement by the denticle ruler method and the legend integrity for the first S in STATES and the O in OF are also presented. It was found that the listing of broken or partially broken S and O letters in the legend was useful in facilitating die identification. Additional observations were made when necessary to complete the die descriptions.

Table 1

1877-S Obverse Dies

Obverse Die	Shield Position	Date Placement	Quality of First S in STATES	Quality of O in OF	Additional Observations
A-1	SP-8	DR-1L	Partial	Broken	Obverse crack
A-2	SP-8	DR-1C	Broken	Broken	Recut 18
A-3	SP-8	DR-1L	Broken	Partial	
A-4	SP-7	DR-0R	Full	Full	
A-5	SP-8	DR-1R	Broken	Broken	
A-6	SP-7	DR-0B1	Broken	Partial	
A-7	SP-8.5	DR-1B2	Broken	Full	Die defect at A2
A-8	SP-8	DR-1C	Full	Full	
A-9	SP-7	DR-0B1	Broken	Full	
A-10	SP-7	DR-0R	Broken	Broken	Last 7 recut up
A-11	SP-8	DR-1C	Broken	Broken	

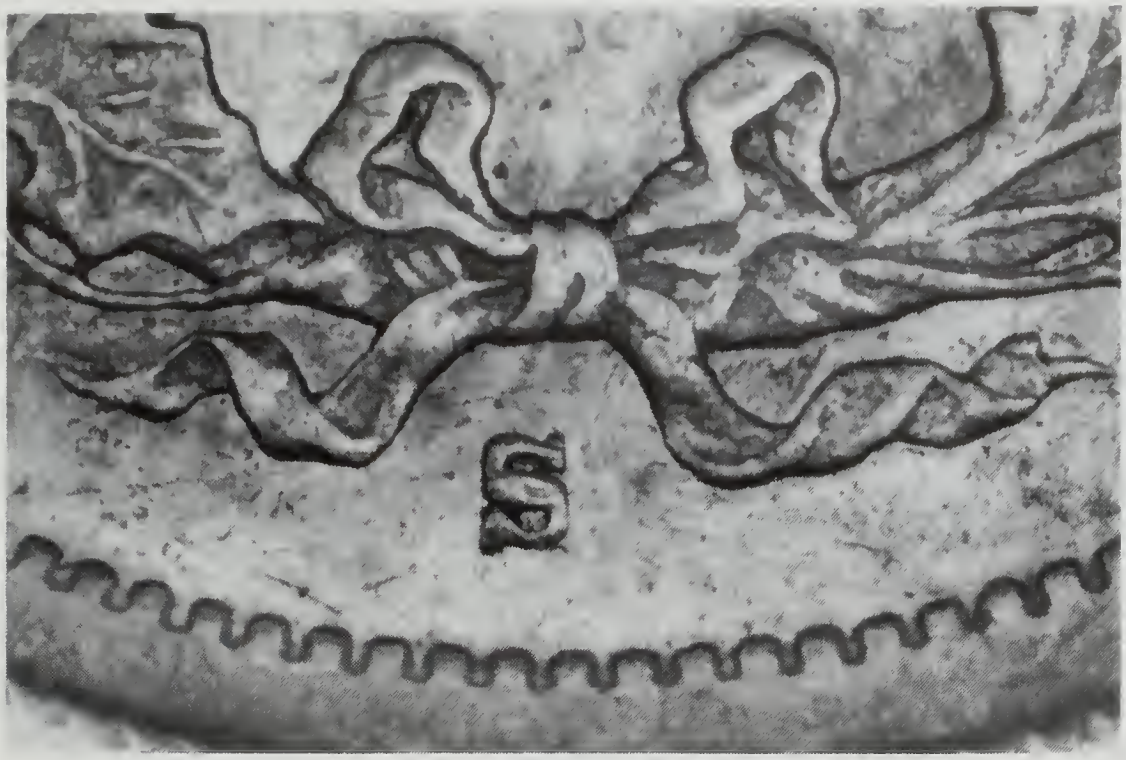
1877-S A-4 Dime, DR-OR

Table 2

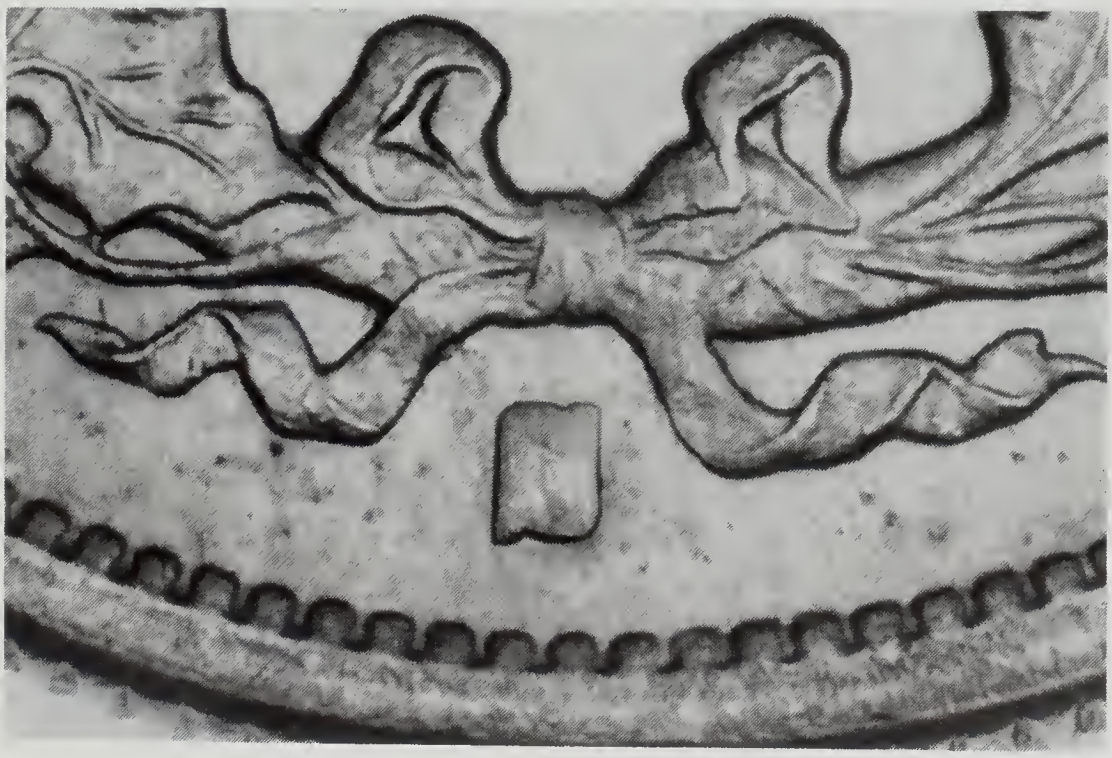
1877-S Reverse Dies

Reverse Die	Mintmark Size	Percent of Segment Left & Right of Mintmark	Percent of Mintmark Above Base of Ribbon	Additional Observations
A (A-I)	Small S	60 - 40	20	
B (A-2)	Small Thick S	70 - 30	40	Die defect in wreath at 8:00
C	Small S	50 - 50	20	Mintmark tilts left
D	Small S	60 - 40	60	
E	Medium Thick S	60 - 40	30	Die file marks under N in ONE
F	Small S	60 - 40	50	Dot on lower left of corn ear
G	Small S	60 - 40	40	
H	Small S	50 - 50	20	
I	Medium Thick S	80 - 20	30	
J	Small Thick S	60 - 40	60	

The reverse dies were classified by their die characteristics and the results given in Table 2. John McCloskey presented a very timely technique for identifying San Francisco mint dies in Issue #54 of the journal. This quantitative procedure utilizes segment length estimations between the mintmark and the left and right ribbon ends. Further information can be collected by the analysis of segment lengths above and below the mintmark and the mintmark position with respect to a line connecting the base of the ribbon ends. The reverse dies of the 1877-S dime are classified using this technique. The reverse dies are identified by letters starting with the letter A. Mintmarks are identified by two size designations, a Small S mintmark that measures 0.8 mm tall and a Medium S mintmark that measures 0.9 mm tall. Both of these mintmarks are illustrated with photographs. In his "Encyclopedia of U.S. and Colonial Coins" Breen describes the Medium S as a taller narrow S for the 1877-S entries. However, since both mintmarks have very similar outlines, it is possible that die preparation could have caused these size differences rather than two different mintmark punches. Additional comments have been made where necessary to complete the description of the reverse die.



1877-S Dime, Small S Mintmark



1877-S Dime, Medium S Mintmark

This project would not be complete without an attempt to provide a listing of the obverse and reverse die pairings. The results of these findings are provided in Table 3.

Conclusions

The identification of 11 obverse dies for the 1877-S dime appears in line with the mintage for this date. This information gives us a reasonable guideline of 200,000 pieces per die for dates with high mintages. Finally, I would like to state that the denticle ruler technique for date placement and the identification of broken or partial S and O letters in the legend were both necessary features for the quick identification of the obverse dies of the 1877-S dimes. Coins grading as low as VG could easily be identified with this information. I highly recommend the denticle ruler technique for the dime specialist studying Seated dimes.

I would like to thank Tom Mulvaney for the excellent photographs of the 1877-S dimes.

Table 3

1877-S Die Pairings

Obverse Dies	Reverse Dies
A-1	A
A-2	B , C
A-3	C
A-4	D
A-5	E
A-6	F
A-7	G
A-8	H , I , J
A-9	B
A-10	F
A-11	E