# A Register of Liberty Seated Half Dollar Varieties

# Volume I

# San Francisco Branch Mint



# By Bill Bugert

With special edits by and consultations with Randy Wiley

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To My Wife, Judy
For your love, caring, and concern and
For patiently tolerating my numismatic fanaticism
Love always,
Bill

### **Foreword**

Collector interest in all the Liberty Seated denominations, especially collecting by die variety, has intensified during the past 10 years. No doubt, this is partially due to the proliferation of books and articles on the series as well as the increasing cost of collecting the older and very popular bust series.

It took a number of years but since the publication of Randy Wiley's and my book, *The Complete Guide to Liberty Seated Half Dollars* in 1993, I've noticed that these half dollars have increased in popularity. These mid-sized coins are large enough to study die diagnostics without excessively straining your eyesight and their individual costs were reasonable when compared to their rarity. Many collectors are attracted to collecting the half dollars and, depending on personal budget, patience, and level of interest, try to complete various sets such as complete date/mint, date, mint, and/or type.

The Complete Guide to Liberty Seated Half Dollars listed a finite and pre-determined number of the most easily identifiable die varieties of the series. Many other die varieties were known at the time of publication but were not included for various reasons best discussed elsewhere. This Register is different and individually documents the Liberty Seated Half Dollar die marriages of obverse, reverse, and collar dies currently known. It is commonly misunderstood by many collectors and dealers that the Liberty Seated denominations have been studied as extensively as the older copper and bust series, where the discovery of new die marriages is rare. This is far from reality. The older copper and bust series have been extensively collected and exhaustively studied for many decades. The Liberty Seated series are far behind in that respect and have a lot of catching up to do. I hope to help that along for the half dollars.

This *Register* does not include everything everyone wants to know about San Francisco Branch Mint Liberty Seated half dollars. Specifically, little information is included on condition census (generally, I have little interest in that) and there is no pricing information (pricing information has limited value because it is too volatile and including it would quickly outdate this reference). Alternatively, I've included estimated rarity ratings and will leave condition census and valuations for others to study and to report.

This publication is the first in a series of planned volumes of information on the die marriages on Liberty Seated Half Dollars. It is no coincidence that the name of this *Register* is similar to ML Beistle's 1929 reference on half dollar die varieties. He provided me with my initial impetus to collect half dollars by die marriage. I've studied and written about ML Beistle extensively and have an admiration for his personal and professional accomplishments.

Lastly, this publication could not have been possible without the cooperative efforts of Randy Wiley. He knows more about Liberty Seated Half Dollars than anyone I know. He and I have been studying the die marriages of these coins for decades and much of the information we derived together is contained herein.

Thanks for taking the time to read this and I hope this *Register* finds its way into your numismatic library.

Bill Bugert Gettysburg, PA May 2009

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### Introduction

#### The purpose of this *Register* is four-fold:

- To document all the currently known Liberty Seated half dollars die marriages produced at the San Francisco Branch Mint
- To assist the beginning or advanced Liberty Seated half dollar collector into expanding beyond type, date, or date/mint collecting into die marriage collecting
- To aid the casual collector or dealer with proper variety identification and other pertinent information
- To establish a standard nomenclature for the Liberty Seated half dollar die marriages.

At the time of publication, all known Liberty Seated San Francisco Branch Mint die marriages are documented in this *Register*. For 1875, 1876, and 1877, more die marriages will be discovered - the mintages and number of dies known are exceptionally high and it will take many years of collective effort to discover and document all the various possible combinations. For those dates, this *Register* is an excellent starting point. For all other dates, any new die marriage discoveries are less likely and probably scarce or rare.

In this *Register*, I included the key characteristics of obverse and reverse die marriages so that you could readily identify your half dollar. It is important to note that the mid-1800 minting technology had advanced to a state that, in contrast to the pre-1836 bust style designs, the date, with the exception of 1853-1855 Arrows half dollars, and mintmarks were the only design elements emplaced into the working dies used to mint coins. The other design elements such as dentils, Liberty, stars, denomination, legend, motto, and eagle were all in the hub and, consequently, have no variations when transferred to the working dies. These advancements, however convenient for the minting process, vastly compound the difficulty in identifying characteristics of the individual working dies and consequently, the die marriages. We must rely on variations in the placements of a date, mintmarks, and die imperfections for proper variety identification.

For ease of the readers' use, I desired to depict one obverse and reverse die marriage per page; this space limitation forced me to be selective on the die characteristics that I specified and photographed. Consequently, I picked the die lines and cracks that I thought were most prevalent for that variety and that could be easily identified using a quality hand held 10-power magnifier and, for date grid measurements, a 10-power hand held optical comparator. Make no mistake about it, a good 10-power stereomicroscope with a reticle is a worthwhile investment when studying and attributing varieties of all denominations.

Excluding the Beistle number system which is not used today, the current standard Liberty Seated Half Dollar variety nomenclature is the WB-100 series system. This WB number, for Wiley-Bugert, is derived from the 1993 book, *The Complete Guide to Liberty Seated Half Dollars*. Unfortunately and a point of some confusion, many WB-100 numbers by design include more than one die marriage per number because that book lists major varieties only. For example, the 1865-S WB-102 Small thin S half dollar includes 5 reverse dies. This system is unsatisfactory for the serious half dollar variety collector where a single number represents a single die marriage. This *Register* starts anew with separate die marriages with WB-X series numbers.

It is very important to note that the die characteristics photographed and/or described herein may or may not be visible on your coin. Die states, coin wear, toning, damage, etc. may affect the visibility of these characteristics and, for those reasons, you may find some diagnostics on your half dollar that are not listed in my descriptions. In many cases, I've included photographs of the latest die state and may include comments of other die states. Coins grading below VG will not show most of the die characteristics I've depicted simply because the key die diagnostics are worn away.

In discussing my plans with others before this reference was published, some collectors and dealers wanted an online version while others wanted a useful physical media. I chose the later in a workbook style three-ring binder and plastic spiral binding formats for easy desktop reference work and for portable operations at a coin show. I wanted a user to be able to quickly and easily pluck useful attribution information from this *Register*. I believe this format accomplishes that. All too often, the hardbound books in my numismatic library are too tightly bound, making page turning awkward and potentially loosening the binding glue or breaking the binding's back. I did not want my readers to suffer this inconvenience especially when I wish my *Register* to be used often.

It is my desire that this reference creates sufficient interest in collecting by die marriage and someday the "Seated Half Nut Club" (i.e., similar to the "Bust Half Nut Club" where a requirement for membership is owning at least 100 different varieties of the bust half dollar series) is a well known and popular club.

I know it will be a disappointment to many, but I did not include pricing information, availability, or valuations of the die varieties in this *Register*. In my experience, that type of information is very quickly outdated and useless after a few months if not updated. Collector interest and *the market will drive most valuations*. The financial complexities of the rare coin market are best left to the economists. As an alternative, I included initial rarity estimates. Almost all the rarity numbers are my estimates based primarily on years of observation and by discussions with other knowledgeable individuals. I have a varying comfort level with many of the dates; for the extremes, the later high mintage dates are rough guesses because there are so many out there and it will take years to properly associate a correct rarity number with a specific die marriage. Conversely, estimating the 1878-S rarity is rather easy because it is a very well known key to the series. I have a moderate comfort level with the rarity estimates for the varieties of the other dates in between.

This book does not include a tutorial on basic coin collecting, grading half dollars, or a lengthy history behind the Liberty Seated series. I assume the reader has a basic understanding of these numismatic topics; besides, many other references cover them in great detail and I will not duplicate the efforts of others here. The following introductory sections contain a lot of background information required to understand the variety attributions of the Liberty Seated Half Dollar series. Please take sufficient time to read and understand them before attempting to use this *Register*.

At this point, I think it appropriate to provide some advice and encouragement to collectors of die marriages of Liberty Seated Half Dollars. But first, if you are looking to complete a die marriage set in a few short years, look elsewhere. It will literally take many years of aggressive searching to fill all or most of the holes. Even with the benefit of a thick wallet, many die marriages seldom appear on the market and when they do, are quickly snatched up by other serious collectors with similar goals. If you bound your goal to collecting a few years, mints, or types, then the target becomes easier to attain. Otherwise, collecting all the die marriages of all the dates is an expensive lifetime commitment. I know of only a few collectors, including myself, with the stamina to attempt this and, I can attest, I've spent over three decades collecting die marriages of these halves. However, it is a wonderful pastime that has kept my interest for many years and provided many hours of enjoyment; it also helps to have a supportive spouse or partner. I wish you the same.

Lastly, as I mentioned in the Foreword, this *Register* would not have been possible without the efforts of my numismatic friend and colleague, Randy Wiley. He and I have been studying these half dollars together since the early 1980's and we've spent many hours together engrossed in determining die diagnostics, counting reeds, taking notes, and discussing new finds. His astute analytical collecting techniques, motivation, and sheer determination are in a large part responsible for what is being published herein. For that and for his friendship, I thank him.

# Abbreviations, Conventions, and Definitions of Terms Used in this Book

It is very important to understand the terms used throughout this text so that my written descriptions convey the proper meaning to you, the reader.

**Liberty and LIBERTY**. "Liberty" in lower case letters refers to the figure of Miss Liberty on the obverse. "LIBERTY" in upper case letters refers to the words LIBERTY found on the scroll of the obverse design.

**Viewing a coin**. Often confusing if not clarified, the terms "right" and "left" are used when viewing a coin and referencing features from the viewpoint of the observer's right and left respectfully. For example, when referring to the eagle's left claw, the claw referred to is that on the viewer's left and NOT the eagle's left claw (which would be on the observer's right).

**Olive leaf numbering**. For ease of reference, olive leaves on the reverse design are numbered counter-clockwise 1 thru 5 starting with the lowest leaf.

**Star numbering**. Obverse stars are counted clockwise starting with the first star on the lower left to the thirteenth start at the lower right.

**Measuring units**. I opted for the U.S. standard of inches to measure date height, mintmark size, and diameters of coins.

**Photographs.** Almost all images are not actual size but scaled to annotate various desired features. I chose to establish a common arbitrary reference point for the mintmark on each die marriage; mintmark positions are depicted relative to the flat topped upper edge of the letter F in HALF. Additionally, some collectors may want to reference date positions to the dentils below the date instead of the date grid technique. Consequently, date position images include the lower dentils.

Date Grid measurements. See the detailed explanation elsewhere in this Register.

**Device and device naming.** A device is the primary motif on the obverse and reverse die. For the obverse, the primary device is the figure of Liberty while on the reverse, it is the eagle. Supporting devices are also on the observe and reverse. See the supplemental diagrams and descriptions.

Die Variety versus Die Marriage. These terms, although different, are used almost interchangeably. Die variety refers to a coin struck from dies and, irrespective of die states, all pieces from those dies have the same characteristics. Die marriage refers to a coin struck from a combination of three dies; the obverse, reverse, and collar dies. The differences are subtle but they, as mentioned, are almost used interchangeably. It is important to note that a die crack may help to identify a die variety but is a die state and not a separate die variety or marriage.

EDS, MDS, LDS, VLDS. These acronyms are short for early dies state, middle die state, late die state, very late die state and refer to a subjective progress of die deterioration.

**K-1 thru K-12.** The abbreviation for a clock's hour hand position (i.e., 1 o'clock thru 12 o'clock) specifically around the outer diameter of a coin.

Lines, Lumps, and Gouges. These terms are utilized when describing the various die diagnostics for each variety. A *line* on the coin is raised and results from a scratch, stray mark, slip of the engraver's tool, or polishing of the dies. A *lump* is a raised piece of metal on the coin that resulted from die damage, rust, clashing of the dies. *Gouges* are also raised metal on a coin resulting from oddly shaped heavier damage to the die. These three items are critical to differentiating dies and identifying the key die characteristics.

Reverse shield line numbering system. Reverse vertical shield lines are designated alpha-numerically with a letter designating a group of shield lines and a number referencing an individual vertical shield line within that group. For example, B-3 refers to the third (3) vertical line (counting from the left) in the second grouping of shield lines (group B). C-2 refers to the second shield line in the third grouping. Possibilities include A thru F – 1 thru 3.

WB-#. Die marriages are designated with a WB-#; WB is an acronym for Wiley-Bugert. I gave much thought to what numbering system to use in this reference. Randy Wiley and I used a WB-100 series numbering system in our 1993 book, *The Complete Guide to Liberty Seated Half Dollars*. Although seemingly ideal, I couldn't use that same system because some WB-100 series numbers used in our 1993 book include many die marriages lumped under a single WB variety number. I wanted to have a compact, easily remembered and referenced system that, for inventory and display purposes, could be readily sorted on a computer. The WB-# format was the next best option and is used herein. To aid the reader and long-time collectors, cross references to our first book's WB-100 series numbers are included for each die marriage.

**Cross references.** References of a specific die marriage to other publications are provided with each varieties' description.

WB = Randy Wiley and Bill Bugert's *The Complete Guide to Liberty Seated Half Dollars* 

MPD = Kevin Flynn's *Two Dates are Better than One: A Collector's Guide to Misplaced Dates*.

# **Design Types**

Liberty Seated Half Dollars were minted at the San Francisco Branch Mint from 1855 to 1878. There were four major design types on San Francisco Half Dollars during this period and they are detailed in the following table.

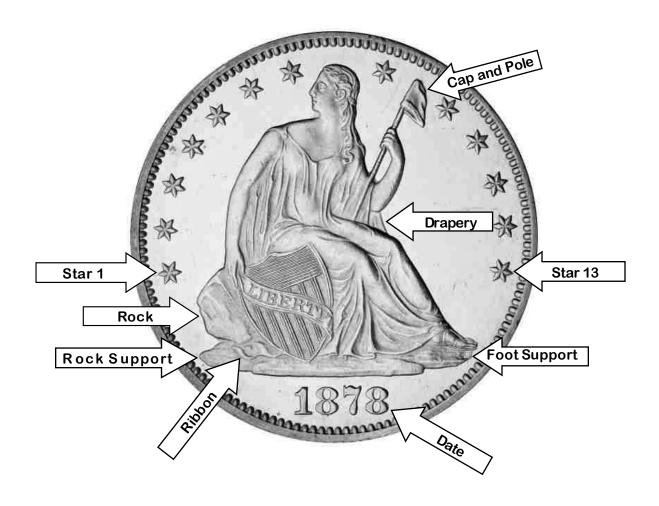
Major Design Type	Dates of Design Type	Design Characteristics
1850's With Arrows	1855	Outfacing arrowheads were added at each side of the date signifying a reduction of the planchet weight from 206.25 grains to 192 grains. These arrowheads were added to temporary master dies to avoid the potential use of an unmarked die; therefore, all 1855-S half dollars have the arrows but they, and the date, have no position variations.
No Motto	1856 – 1866	The arrowheads were removed and the major design returned to that as on pre-1853 half dollars without a motto on the reverse above the eagle's head. Some 1866-S half dollars have no motto while most are included in the next category.
With Motto	1866 - 1878	The horrors of the American Civil War from 1861 to 1865 precipitated a major design change with the addition of the motto IN GOD WE TRUST on a scroll on the reverse field above the eagle. One 1866-S reverse die has no motto while the remaining dies include the motto.
1870's With Arrows	1873 - 1874	In 1873, outfacing arrowheads were added at each side of the date signifying an increase of the planchet weight from 192 grains to 192.9 grains. These arrowheads were not added to temporary master dies as in 1855 and, therefore, 1873-1874 Arrows half dollars have date and arrows position variations. Since this design change occurred after the January 1, 1873, some 1873 no arrows half dollars were minted before the change.

# **Reverse Hubs**

Subtle alterations were made to the reverse hubs and used at the San Francisco Branch Mint during this timeframe. Identified as "Types," they are not specifically a major design change (as on the previous page) but minor adjustments to the characteristics of the reverse hubs that eventually transfer to the working dies and then to the coins themselves. These types are differentiated here.

Type 1		Type 2		
1855 to 186	60	1858 to 1865		
Short lower base of the	(HA)L(F)		ower base of the (HA)L(F) on the eagle's left leg	
Type 1	Туре	1/2	Type 2	
1866 to 1877	1877	only	1876 to 1878	
Open lower bud Closed talons on claw Thick olive leaf stems	Open lov Closed talor Thick olive	ns on claw	Closed lower bud Open talons on claw Thin olive leaf stems	
		Î		

# Naming conventions: Obverse



The obverse design includes the figure of the Goddess Liberty seated on a rock looking over her right (observer's left) shoulder. Liberty is wearing a Greek chiton, or loose fitting gown, with a clasp at her shoulder. Her neck, upper chest, and arms are exposed. Liberty's hand supports the Shield of the United States, a sign of national preparedness, which is wrapped in a scroll inscribed with LIBERTY; her other hand grasps a pole surmounted by a pileus, a liberty cap emblematic of freedom. Thirteen stars, representing the thirteen original states, are spaced around the outer design from K-8 to K-4. As with all early silver coinage, the outermost design has equally spaced design elements called dentils.

# Naming conventions: Reverse



The reverse design portrays an eagle with wings displayed bearing the Shield of the United States on its chest. The eagle is clutching an olive branch, which symbolizes peace, in its right (observer's left) claw and three arrows, symbolizing preparedness for war, in its left (observer's right) claw. The denomination abbreviated HALF DOL.

is below the eagle and the legend UNITED STATES OF AMERICA is above the eagle. Like the obverse, the outermost design has equally spaced design elements called dentils. For half dollars dating 1866 to 1891, the motto IN GOD WE TRUST is on a scroll in the field above the eagle.

#### **Date Grid Measurements**

Unlike bust coinage, all Liberty Seated Half Dollars were struck from dies with most of the designs (e.g., Liberty and stars) impressed initially from a hub. Consequently, differentiating dies is difficult at best and the die marriage collector must rely on non-hubbed die diagnostics. For the obverse die, these diagnostics include die lines and cracks, die gouges, die maintenance remnants, and most importantly, date placement. Dates were emplaced into the working die with multi-figure and sometimes single digit logotypes and, therefore, obverse dies may have noticeable die placement variations. Mastering a technique to define a date placement will facilitate a quick method of identifying possible die varieties for a given date placement, especially when no other diagnostics are evident. Here is such a method: the date grid measurement (e.g., M3.5, .030").

The date grid is based on the position of the date's 1 and consists of two components: the position of the right vertical edge of the 1 with relation to Liberty's shield lines and, secondly, the distance between the top of the 1 and the rock support. A stereomicroscope with a linear scale on a reticule or an optical comparator is ideal for viewing and measuring the date placement. The photograph below symbolically depicts a microscope's reticle (vertical line) aligned in the correct measuring position. The shield lines are assigned an alphanumeric system whereby, the three center sets of shield lines are L (left), M, (middle), and R (right) and the individual shield lines are 1, 2, 3 (4, 5 are virtual shield lines equidistant in the large space between the shield line sets). The date placement is the real or virtual shield line (including a decimal increment between shield lines) where the reticle (aligned adjacent to the right edge of the 1) intersects the bottom outside shield edge. Increments of .5 signify an interpolation between two lines or virtual lines such that M2.5 is the seam between vertical stripes 2 and 3 while M3.5 is the right edge of vertical stripe 3, as below. Furthermore, the distance in inches between the top of the 1 and the bottom edge of the rock support is the second component of the date grid. The example below is of an 1840 half dollar with a date grid of M3.5, .030".



Be aware that date grid is not and is not meant to be an absolute identifier for a specific obverse die. It is merely a tool for identifying a numeric date position for possible obverse die identification. In my experience, two experienced numismatists with the same equipment on the same coin may come up with two different date grids. Measuring a date grid is not absolute and I, therefore, do not use it to positively identify a specific obverse die. Many half dollars of different dies have the same date grid and, additionally, die states affect a date grid's measurement.

Identifying known die marriages by the date grid allows comparison of an unknown die variety's date placement, thereby narrowing down an unidentified obverse die to a limited number of known varieties. In my experience, many date placements are similar for a given date but different enough to allow minute differentiation. The list below represents the date grid measurements for hypothetical half dollars of a certain date:

Obverse	Date grid
1	M3, .008"
2	M3, .025"
3	M3.5, .028"
4	M4, .022"
5	M4.5, .027"

When encountering an unidentified half dollar, measure the date grid and compare it to the list of known obverse dies for the same date. You should be able to identify it to one or two of the obverse dies. In my photo example, the obverse die is closest to obverse 3. Further study of other die diagnostics may confirm the identification.

Die states affect date grid measurements. Late die states with heavily polished or worn dies will have different measurements than the same die of an earlier dies state. For example, the distance between the top of the 1 and the rock may be greater on the polished die than the non-polished die. Consider this effect when comparing date grid measurements.

The date grid is a useful measurement to aid in identifying Liberty Seated half dollar obverse dies. Collectors of other Liberty Seated denominations utilize date placements in relation to dentils but I believe this method is more accurate and useful for half dollars.

# **Edge Reeding and Collars**

Often overlooked, the edge of a coin contains reeds. Reeds were implanted with a collar, the coin's third die, and were meant to deter nefarious efforts to clandestinely remove silver from the edges of coins for profit. All non-error Liberty Seated Half Dollars have reeds.

Reeded collars were heavy steel plates with a bore the size of the minted coin. A blank planchet was placed in the bore and reeds were raised on the edge of the coin at the same time the coin's designs were raised by the obverse and reverse dies.

Reeding on a coin was not standardized. Collars were obtained by the Branch Mints through various efforts including in-house manufacturing, local procurement, and from the Philadelphia Mint and these practices resulted in variances in numbers and sizes of reeds on half dollar edges.

Reed counts are useful information in counterfeit detection, authentication, and determining die emission sequences. For example, all 1878-S half dollars, a key to the series, have 147 reeds. The 1878-P half dollars have reed counts in the 150's; notwithstanding other die diagnostics, an 1878-S half dollar without the correct reed count would be suspect for an added mintmark.

The following table itemizes reed counts for all San Francisco half dollars.

	Edge Reed Count												
	138	139	140	141	142	143	144	145	146	147	148	149	150
Date													
1855-S													
1856-S													
1857-S													
1858-S													
1859-S	$\checkmark$	$\checkmark$											
1860-S													
1861-S													
1862-S		$\checkmark$											
1863-S													
1864-S				$\checkmark$									
1865-S													
1866-S	$\checkmark$		$\checkmark$										
1867-S													
1868-S													
1869-S													
1870-S													
1871-S													
1872-S						V							
1873-S													
1874-S													
1875-S										V	V		
1876-S										V	V	V	
1877-S													
1878-S										V			

# San Francisco Mintmark Sizes

Of the four mints (Philadelphia, New Orleans, Carson City, and San Francisco) that produced Liberty Seated Half Dollars, the dies for the San Francisco Branch Mint had the largest number of different mintmark sizes and styles. Mintmarks were added to the working dies at Philadelphia most likely just before shipment to the Branch Mints; in this situation, all dies for one specific shipment were probably lined up and the mintmark emplaced by the same punch one after the other. A punch with the letter "S" was hammered by hand into the working die(s); variances in the exact placement may vary from die to die and account for the differences we enjoy today. In some instances, the punch broke and the mintmark on the die(s) would therefore have a broken appearance. In others, multiple blows from a hammer were necessary to emplace the mintmark with a proper depth and appearance. If the alignment of the punch varied between blows, recut mintmarks consequently appeared. The different mintmark sizes and styles are depicted below.

Mintmark Size	Micro	Minute	Very Small	Small Thin	Small wide Broken	Small wide Perfect	Medium- small	Medium	Large
Height of	.029-	.032-	.035-	.038-	.041-	.042-	.044-	.054-	.060-
mintmark	.031"	.034"	.037"	.040"	.042"	.043"	.048"	.056"	.067"
Sample photo			100	S	(20) 15		S		
1855-S 1856-S									$\sqrt{}$
1857-S to								V	<b>√</b>
1861-S 1862-S					-1			- 1	-1
1863-S					1	. 1		√	√
1864-S				. 1	1	1			.1
1865-S				1	1	√			√
				√	√				
1866-S NM				$\sqrt{}$					
1866-S			<b>√</b>						
WM			<b>Y</b>						
1867-S to 1870-S			$\checkmark$						
1871-S			V						
1872-S						$\sqrt{}$	$\sqrt{}$		
1873-S									
1874-S		$\sqrt{}$				$\sqrt{}$	V		
1875-S	V					$\sqrt{}$	V		
1876-S 1877-S	√		√						
TY 1 1876-S 1877-S			<b>√</b>						
1878-S TY 2			V						

# **Counting Reeds**

Periodically I've been asked that if determining a reed count is so important, then how do you easily count reeds. Randy Wiley and I have successfully been using a simple technique for years; with it, I have counted reeds on well over 1,500 Liberty Seated Half dollars and many other smaller denominations.

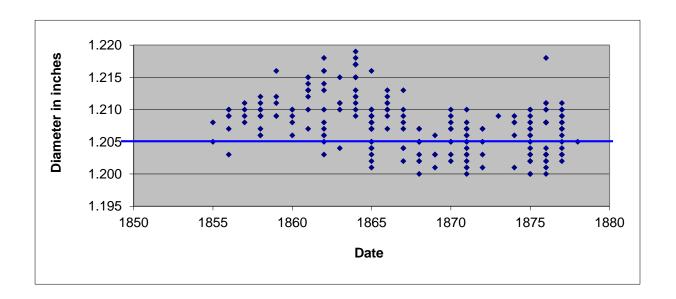
Counting reeds is actually quick and simple if you understand the technique and have a few tools. Simply remove the reflector from an inexpensive flashlight, place the coin into the reflector under your stereo microscope, and slowly rotate the reflector with the coin while viewing the in-focus edge (i.e., reeds) through the microscope. Start at an obvious flaw (all

coins have them) and, count (out loud is best so that you can ignore distractions) the reeds using the reticule of your scope to keep track of your position; stop for breathers at easily referenced places (e.g., nicks, lint, cracks in the collar, etc). Continue until you get to the starting reed. You may have to initially adjust the coin in the reflector to keep it in focus for the entire counting session. With practice, you can easily and accurately count the reeds on a coin in about 2-3 minutes. Careful with the reflector surfaces; they scratch easily and you may end up replacing it more often than you like. One more thing, you can also photograph the edge of the coin with this technique.

# **Half Dollar Diameters**

The standard size of a half dollar diameter has been since 1839, and still is, 1.205 inches. In my experience, few half dollars have that exact diameter. Since the diameter of a coin is dictated by the diameter of the opening in the collar and collars were procured through various methods (local, procured from the Philadelphia Mint, made in-house), there is no wonder that slight variations in half dollar sizes can be found.

The following graphic presents summary information for the diameters of over 230 Liberty Seated Half Dollars struck at the San Francisco Branch Mint. As you can see, values are all over the graph. A few obvious conclusions can be ascertained: few half dollars are of the standard diameter and most pre-1865 halves are over the 1.205 inch standard.



# **Rarity Ratings**

Included with the description of each die marriage is an estimated rarity rating. These ratings are based on the Sheldon Rarity Scale as depicted in the following table. All rarity estimates are my own and are based on my observations and, in some instances, educated guesses. Few varieties are rated R-6 or above and few are rated R-2 and below. I will be the first to admit that it will literally take years to establish more accurate rarity ratings for each variety but I believe most will range from R-5 to R-3.

The *rarity rating* I assigned to each die marriage is a single number which *includes coins of all grades*. In my experience, listing by-grade rarity values can lead to

misrepresenting the rarity of a die marriage by misquoting grade rarities rather than overall rarities. Naturally, some grades are rarer than others, specifically Uncirculated coins, but I will leave that study and accompanying condition census listings to others.

Care must be exercised when trying to relate a die marriage's worth to rarity. There is no direct correlation between value and rarity and trying to correlate the two would produce misleading results. Some die marriages are rare but not noteworthy enough to gain the prominence enjoyed by some more popular rarities. Rarity is only one factor in determining market value.

Rarity Rating	Estimated number of known pieces
R-8	1-3
R-7	4 - 12
R-6	13 - 30
R-5	31 - 75
R-4	76 - 200
R-3	201 - 500
R-2	501 - 1,250
R-1	1,250 or more

# **Emission Sequence**

The die marriages of most dates are listed in ascending WB-X order per an estimated die emission sequence order with the first number is the first minted die marriage to the highest number being the last (usually the transitional die with the preceding or subsequent years). Factors considered to estimate this die emission sequence include die wear, die abrasions, die defects, collar groupings, and use of mintmark sizes.

1875-S, 1876-S, and 1877-S are listed in a *preliminary* emission sequence because Randy and I both believe there will be additional die marriages discovered which may negate any pre-established emission sequence. The establishment of the final sequences for these dates will be left for later efforts.

## **Miscellaneous Information**

Early San Francisco Branch Mint History. With John Marshall's discovery of gold at Sutter's Mill near Coloma, California in 1848, huge amounts of gold were mined in the surrounding areas. With the Philadelphia Mint too distant to accommodate the demand for ore refining and coin minting and with an influx of population of prospectors driving demand for hard currency, coins of many different countries circulated in the West primarily because U.S. coins were in short supply. Local non-government mints opened and produced gold coinage to temporarily meet the demand for a chaotic western coinage situation. To remedy this situation, the San Francisco Branch Mint was authorized by Congress in 1852, opened for the receipt of gold and silver ore deposits in a very small ill-equipped building in April 1854, and immediately focused on the production gold eagles and double eagles. Silver coinage began in small quantities in 1855 and both eventually replaced the foreign coinage in circulation with U.S. minted coinage. Growing Mint operations outgrew this small facility and, in 1872-1873, a new suitable building in a favorable San Francisco location was completed and occupied in 1874.

Half dollars, the largest circulating silver coins, were produced in low numbers starting in 1855 and minted in various quantities every year, for Liberty Seated Half Dollars, through 1878. In 1878, with the passage of the Bland-Allison Act, silver dollar production was the emphasis and the minting of Liberty Seated half dollars at the San Francisco Branch Mint ceased.

<u>Chopmarked Half Dollars.</u> Chopmarks are small punched figures on a coin that were applied by Far Eastern bankers or merchants to certify weight and purity. U.S. coins that reached the Far East were often treated as bullion because gold and silver coins infrequently circulated. Hence, the desire to guarantee their precious metal content.

Chopmarks can be infrequently found stamped into Liberty Seated half dollars. The dates most often seen are the early to mid-1860's from the San Francisco Branch Mint. A few small hoards of chopmarked half dollar have surfaced and were dispersed over the years. A few sporadic pieces can be infrequently found. Chopmarked coins don't necessarily command a premium because a chopmark is actually damage to the coin applied outside the Mint. However, some collectors specialize in chopmarked coins for their historical perspective and desire them for their collections.

Guatemala Hoard Coins. In his Complete Encyclopedia of US and Colonial Coins, Walter Breen discusses a large cache of Liberty Seated Half Dollars, known as the Guatemala Hoard (for the location of the find), and it is worth repeating here: "...about 1956 unidentified individuals discovered an immense hoard in Guatemala, reflecting mass wartime (i.e. Civil War) shipments of coins as bullion. The Guatemala Hoard coins are readily recognizable: They are dated between 1859 and 1865 Philadelphia, and between 1860 and 1865 S, most often between 1861-1862 from either mint, ranging in grade from VF to nearly mint state, all cleaned with baking soda or some abrasive. There were many hundreds of each date, possibly a couple thousand 1861-1862. As there were not later date coins in the part of the hoard I saw (at New Netherlands Coin Co., 1956), most likely the hoard was buried about 1865 or early 1866. Either there were no 1866 S No Motto coins, or they were fished out beforehand; but I have seen none matching the hoard coins."

Don Taxay, in his *Comprehensive Catalogue and Encyclopedia of U.S. Coins*, also mentions the Guatemala Hoard with minor differences in the included coinage dates: "Note: "P" mint half dollars ca. 1859-1865 and "S" mint half dollars ca. 1861-1865 are now relatively common in scrubbed unc. due to a large Guatemala find."

Another source indicates 8-9 thousand XF to AU half dollars were found in 1948 in jars. Dates were mostly 1853-O and 1861-1863-S.

Whatever the exact dates and mints of the coinage, high circulated and mint state grade cleaned S-Mint half dollars of the early to mid-1860's can be found today.

# How To Attribute Your Liberty Seated Half Dollar

Armed with the introductory and the die marriage information contained in this *Register*, most S-Mint Liberty Seated Halves can be readily attributed to a correct variety nomenclature and WB– number. Date and mintmark close up images are displayed at top of each die marriage page because they are position dependent. Additional die diagnostic information and images are contained for the obverse and reverse dies.

At a coin show, you will most likely be able to scrutinize prospective purchases to determine a correct die marriage. Additionally, with advances in the internet, high speed data downloads, and digital imaging technology, many auction houses depict excellent quality images on their website for upcoming auctions.

With a half dollar of an unknown variety in hand, proceed through the following steps.

Obtain or estimate the date-grid location. Compare this measurement to the date grid table contained for the coin's date. This measurement will provide a few obverse die possibilities and you can then check the mintmark position.

Match the mintmark position of your coin to the table contained for each date.

Finally, refer your possibilities to each variety description and check the die diagnostics for your coin against those listed for each die marriage.

With a close-up image of half dollar of an unknown variety <u>on the computer screen</u> (e.g., from an auction website), proceed through the following steps.

Estimate the date position of the 1 by using a straight edge such as the edge of a piece of page. Compare this measurement to the date grid table contained for the coin's date. This measurement will provide a few obverse die possibilities and you can then check the mintmark position.

Match the mintmark position of your coin to the table contained for each date.

Finally, refer your possibilities to each variety description and check the die diagnostics for your coin against those listed for each die marriage.

Both techniques work well. I have personally tested attribution techniques either with a coin in hand or over the internet with the digital archives of a few well known auctions houses. In over 90 per cent of the coins or images checked, I was able to attribute the variety for a high grade (VF+) Liberty Seated Half Dollar. I hope you have similar successes.

# The San Francisco Branch Mint Liberty Seated Half Dollar Die Marriages

#### 1855-S

1855-S is the first year of mintage for Liberty Seated Half Dollars at the San Francisco Branch Mint and one of the low mintage key dates for the series.

As required by the Mint Act of 1853, the standard weight of half dollar planchets was reduced from 206.25 to 192 grains to prevent hoarding and melting. Arrows were placed at each side of the date in 1853-1855 to signify this weight change and all 1855-S halves have these arrows.

There are no variations in the placement of the date or arrows as they were most likely punched into the temporary master dies in use in the 1853-1855 time frame. Consequently, the usual date grid measurement technique of identifying an obverse die is useless and <u>close-up photos of the date for each die marriage</u> are not shown in this *Register* for 1855.

Two reverse dies were used in 1855-S; both have a Large S mintmark with minor position variations and easily identifiable die diagnostics. All 1855-S dies were heavily abraded and/or polished. Three of the four obverse dies have little or no drapery below the elbow and both reverse dies have weak or missing vertical shield lines. Most mid-grade coins seen have a weak "E" in LIBERTY.

Randy Wiley examined the "Louisiana Hoard" of 1855-S half dollars in April 1986. This private collector's hoard was accumulated from 1976 to 1983 and consisted of 87 coins grading as follows: AG/G (15), VG (27), F (17), VF (14), XF (9), and AU (1 – the ex-Ivy "Stanford" 7/1976). Almost half of this hoard graded VG or less; this supports evidence that this date did circulate heavily.

Many 1855-S halves seen have been damaged, re-engraved, repaired, chopmarked, and/or heavily cleaned. Choice, original, problem free 1855-S half dollars of any grade are scarce.

Four die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	1
129,950	Shipped	-	5*	4*	(140)
	Known	4	4	2	(140)

<sup>\* =</sup> Two pairs of dies shipped for 1854 (no coinage) and two reverse dies reserved for 1855.

1855-S		Weak shield lines C1-3; die lines above (AM)ER(ICA)	Weak shield lines A-C1-3; die lines above (AME)R(ICA)		
Obverse and Reverse die		<b>Large S</b>			
identification keys		A	B		
No drapery; die line by Liberty's left index finger	1	WB-1			
Nearly vertical die lines across Liberty's lap	2	WB-2			
Two tiny die lines and heavy clash lines under	3		WB-3		
Liberty's drapery					
Large irregularly shaped lump above the shield in Liberty's gown	4		WB-4		

**1855-S Proof Half Dollars.** A few proof 1855-S halves were struck presumably on occasion of the beginning of half dollar production at the San Francisco Branch Mint. Subsequent to the production of a few proof coins, the same dies were used to strike business coinage (WB-1).

Walter Breen listed three examples of the 1855-S in his proof reference book as follows:

- "(1) Superintendent Birdsall, J. R. Snowden, Mint Cabinet, Div. V, no. 79 (an odd place for it, as this section consisted mostly of patterns and pioneer gold).
- (2) Bolender, March 1956; I (Breen) saw this, and it too could have passed for a Philadelphia proof.
  - (3) Balderhofer: 723, Reed Hawn: 188, \$3,900, a Hollywood firm, reoffered at \$25,000."

I saw the Birdsall coin (Breen coin #1) at the National Numismatic Collection in the Smithsonian Institution when I studied their Liberty Seated Half Dollar inventory in May 1989. I described it as grading 63+, No drapery, proof (proof-like?), bright, die crack between (UNITE)D S(TATES), and die lines below the lower arrow shaft, 12.447 grams in weight, 1.207" in diameter, and a date position of M1.

Breen's coins #1 and #3 1855-S Proof half dollars are depicted below. Breen's coin #2 has not been publicly seen since the Bolender sale in 1956. A fourth coin possibly exists.



Breen coin #1. Smithsonian Institution, National Numismatic Collection Photos #89-115-24, 25. Identified by the light scratch near star 2.



Breen coin #3: Photo courtesy the David Lawrence Rare Coin Auction of the Richmond Collection, NGC Proof-63, 3/2005:1797 @ \$112,125.

According to Randy Wiley, who has extensive researched and documented 1855-S proof half dollars, the recent auction appearances of coin #3 are as follows:

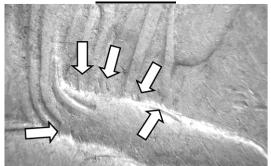
Date	Company	Sale/Collection Name	Lot	Grade	Realized
11/1955	Stack's	Farish Baldenhofer	723	Proof	\$380
8/1973	Stack's	Reed Hawn	188	Proof	\$3,900
11/1977	NASCA	Matthew Bryan	549	Proof-60	\$9,000 reserve; No sale
11/1980	NERCG	David K. Carnegie	751	Proof-65	\$11,000
7/1986	Paramount	Auction '86	1646	Proof-63+	\$18,700
8/1998	B&M	Rarities	180	PCGS Proof-63	No sale
3/2005	DLRC	Richmond	1797	NGC Proof-63	\$112,125

Note: The reverse dark toning spots appear in the Auction '86 sale and, later, a barely noticeable rim nick is evident above the (STAT)E(S).

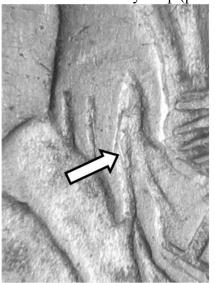
**Chopmarked 1855-S half dollars.** A group of four chopmarked 1855-S halves were reported and depicted in the *Gobrecht Journal* Issue #57 (July 1993). This proves they circulated in the Orient and could account for their apparent scarcity experienced today.

# 1855-S WB-1, Large S

#### Obverse 1



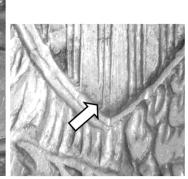
 No drapery below the elbow and heavy clash lines across Liberty's lap (photo)



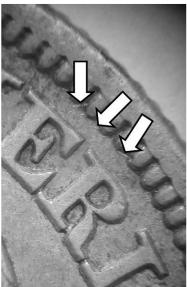
• Vertical die line next to Liberty's left index finger (photo)







- Large S mintmark slightly more to the left than on WB-3 and WB-4 (above left photo)
- Weak bottom shield lines C1-3 (above right photo)



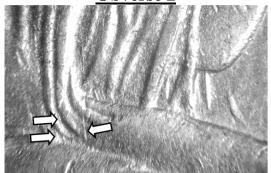
- Three small die lines protruding from the dentils above (AM)ER(ICA) (photo)
- Unfinished under olive leaves

The 1855-S proof half dollars were struck from these dies. Proofs and early business strikes have no clash marks; the no drapery characteristic resulted from the special die preparation for proof strikes.

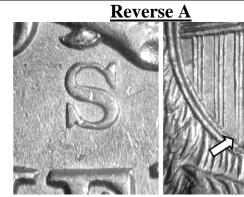
Date grid: M1, .016"	140 weak reeds		Typical diameter = 1.207"	Rarity - 5	
Drapery die state: None Foot support: Stron		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: X	KF45		Coin from the Randy Wiley	collection	
Cross reference: WB-101.				Version 2.34	

# 1855-S WB-2, Large S

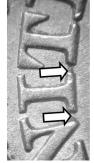


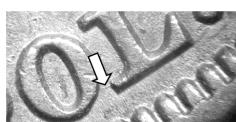


- Partial drapery and light shield clash lines below the elbow and a few nearly vertical die lines across Liberty's lap (photo)
- Recut stars 10-13



- Large S mintmark slightly more to the left than on WB-3 and WB-4 (above left photo)
- Weak bottom shield lines C1-3 (above right photo)



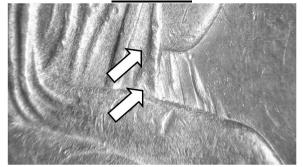


- Die crack along the base of letters (U)NIT(ED) (photo)
- Die crack between (D)OL (photo)
- Die crack connects two lower arrow heads
- Three small die lines protruding from the dentils above (AM)ER(ICA) faint
- Unfinished under olive leaves

This is the second use of this reverse die.						
Date grid: M1, .016" 140 reeds			Typical diameter = 1.208" Rarity - 5			
Drapery die state: Partial Foot support: Strong			Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: A	AU50		Coin from the Randy Wiley collection			
Cross reference: WB-101	1.		Version 2.34			

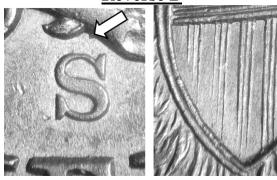
# 1855-S WB-3, Large S

Obverse 3



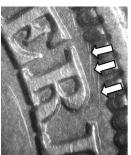
• Two tiny die lines and heavy clash lines under Liberty's drapery (photo)

Reverse B

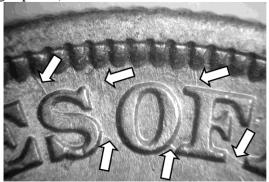


- Large S mintmark slightly more to the right than on WB-1 and WB-2. Tiny tine from the olive stem near the crotch (above left photo)
- Weak bottom shield lines A1-3, B1-3, and C1-3 (above right photo)





- Die lines from dentils to lower olive leaves (above left photo)
- Die lines in field above (AME)R(ICA) (above right photo)

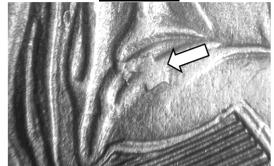


 Die crack along base of and die lines from dentils to (STATE)S OF (photo)

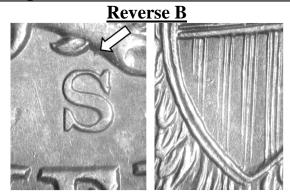
This is the first use of this reverse die.							
Date grid: M1, .016" 140 reeds Typical diameter = 1.210" Rarity - 5					Rarity - 5		
Drapery die state: Partial Foot support: Weak				Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: MS62				Coin from the Randy Wiley collection			
Cross reference: WB-101.					Version 2.34		

# 1855-S WB-4, Large S

#### **Obverse 4**



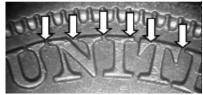
- Large irregularly shaped lump in Liberty's gown above the shield (photo)
- Recut stars 10-13



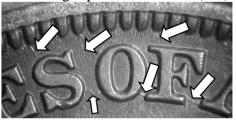
- Large S mintmark slightly more to the right than on WB-1. Tiny tine from feather tip near crotch (above left photo)
- Weak bottom shield lines A1-3, B1-3, and C1-3 (above right photo)



• Long thin die lines above (AME)R(ICA) (photo)



• Die crack along top of letters UNIT(ED) (photo)



• Die crack along base of and die lines from dentils to (STATE)S OF (photo). These die lines are weaker than with WB-3.

This is the second use of this reverse die.							
Date grid: M1, .016" 140 reeds Typical diameter = 1.212" Rarity - 5							
Drapery die state: Partial		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: MS60			Coin from the Randy Wiley collection				
Cross reference: WB-101	1.		Version 2.	34			

# 1856-S

This date is the second year of mintage for half dollars from the newly opened San Francisco Branch Mint. It is a low mintage year and a scarce date popular with collectors. All 1856-S half dollars have a large S mintmark, a nearly closed 5 in the date, and a notch in the lower right base of the 1. Six die marriages are known as depicted in the tables below.

Mintage	Number	Number	Obverse	Reverse	<b>Reed Counts</b>
	of dies	Marriages	Dies	Dies	Known
	Requested	-	12	12	1
211,000	Shipped	-	12	12	(140)
	Known	6	5	3	(140)

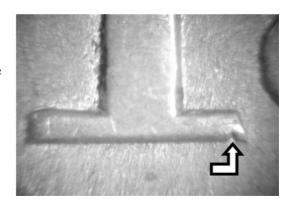
1856-S Obverse and Reverse didentification keys	Die line from dentils between ER; weak bottom C1-3	S almost touches the olive stem; EDS: Die line along dentils above MER LDS: Horizontal die lines below olive leaves	Horizontal die line in feathers			
		Large S				
	A	B	c SS			
Die lines under foot and at toes	Die lines under foot and at toes 1					
Spike in the ball of the foot; clash lines in drapery		WB-2				
Diagonal file line in the rock below Liberty's foot; LDS is No Drapery		WB-3				
Lump on 1; date slants down to right		WB-4	WB-5			
Low date		_	WB-6			

## 1856-S date grid quick reference table

Obverse date grid	Die Marriage
L4, .011"	WB-2
L5.5, .008"	WB-3
M1, .020"	WB-6
M1.5, .014"	WB-1
M2, .013"	WB-5
M2, .014"	WB-4

**Notched 1.** All 1856 half dollars have a notch in the lower right base of the 1. This includes all the obverse dies used on all 1856 half dollars from all mints: Philadelphia, New Orleans, and San Francisco. This feature is noticeable even on low grade coins.

In background, the dates and mintmarks for the Liberty Seated series were punched by hand or later, by a large screw, into the working dies at Philadelphia (hence, the date and mintmark placement variations). The dates were punched using a date gangpunch consisting of between two and four digits of the desired date on a punch



(There has been some controversy over how many digits were on a date gangpunch but that's not addressed here.). The number of individual date gangpunches available for each year's use is unknown. Nevertheless, the punch used for 1856 had a defect in the shape of a notch in the lower right base of the 1 (photo). Logically, a notch on the date punch should be visibly apparent. Perhaps the punch was dropped prior to use and a "dent" was imparted. Perhaps the notch was intentionally affected as a signature of a mint employee. We will most likely never know but notched punches are known on another seated half dollar date (one die for 1848-O) and on other series; early seated half dimes (see *Gobrecht Journal*, Volume 27, Number 80, pages 39-41), 1820 bust dimes, and early capped bust half dollars for instance.

This logotype was also used inter-denominationally and the notch also appears on 1856 large cents and \$10 and \$20 gold pieces.

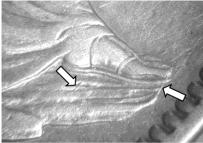
**Mintmark style.** Upon close scrutiny, the style of the mintmark appears to be slightly different between the three reverses used in 1856-S (see photographs on previous page). For example, reverse A has a thin top S, reverse B has a thick top S and nearly closed upper serif, while reverse C is in between those two. In actuality, I believe the same mintmark punch was used on three dies but they were hammered into the die with different force therefore accounting for the different appearance.

# 1856-S WB-1, Large S

**Obverse 1** 

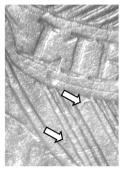


• Date high and to the left (photo)

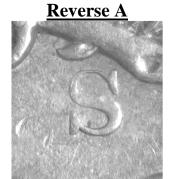


• Small die lines visible in the rock support below Liberty's foot and at the tip of Liberty's toe (photo)





- Vertical die lines below Liberty's chin (above left photo) and in the shield below LI(BERTY) (above right photo)
- On higher graded coins, a lump on the top serif of the 1 can be seen.



Large S mintmark below the crotch (photo)



- Heavy die line from the Dentils towards the upper right serif of (AM)ER(ICA) (photo) and other weaker lines in the dentils above (A)M(ERICA)
- Bottoms of the shield lines C1-3 weak
- Faint die crack along the tops of the letters UNITE(D)
- Left top of shield line, A1, has evidence of a repaired center point hole.

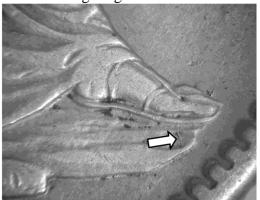
This is the first use of this reverse die. The date is farther to the right than with WB-2.						
Date grid: M1.5, .010"	140 r	eeds only	Typical	diameter = 1.208"	Rarity - 4	
			Dentils: Obverse - Full; Reverse - Full			
1 7				Coin from the Bill Bugert Collection		
Cross reference: WB-101.					Version 2.34	

# 1856-S WB-2, Large S

Obverse 2



• Date far left (photo) with the 56 very slightly recut north; the recutting shows below the bottoms of 56 and are only visible on higher grade coins.

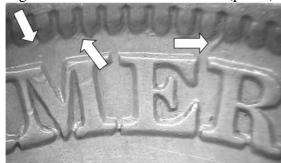


- Vertical die line in the rock support below the ball of Liberty's foot giving the appearance of a spike in the foot (photo)
- Clash lines in Liberty's lap and drapery below the elbow
- Recut stars 3, 4, 7, 8, and 10-12

Reverse A



• Large S mintmark below the crotch (photo)



- Heavy die line from the Dentils towards the upper right serif of (AM)ER(ICA) and other weaker lines in the dentils above (A)M(ERICA) (photo)
- Bottoms of the shield lines C1-3 weak
- Faint die crack along the tops of the letters UNITE(D)
- Left top of shield line, A1, has a repaired center point hole.

This is the second use of this reverse die. This obverse die has the date farther to the left than any other 1856-S half dollars.

Date grid: L4, .011"	140 reeds only		Typical diameter = 1.210"		Rarity - 4
Drapery die state: Full Foot support: Strong		t: Strong	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection		
Cross reference: WB-101.				Version 2.34	

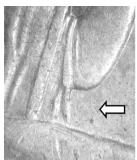
# 1856-S WB-3, Large S

Obverse 3

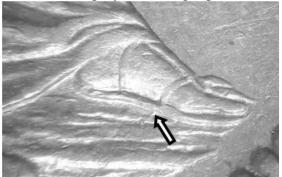


• Very high date; EDS: tiny lump between the dentils below the left edge of the 5 (photo)





- EDS: with drapery (above left photo)
- LDS: no drapery (above right photo)

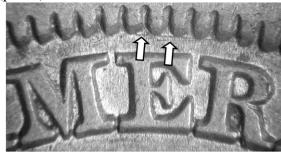


• Diagonal file line in the rock below Liberty's foot (photo)





• Large S mintmark below the crotch, almost touching the olive stem, and tilted to the left (photo)



- Die line lateral to the Dentils above (AM)ER(ICA) (photo)
- Tiny diagonal die lines attached and below (HA)LF
- Unfinished between olive leaves

Although technically a die state and not a design change as in 1839, the no-drapery die state has nevertheless gained popularity with collectors, is rare, and commands a premium over the withdrapery die state. This is the first use of this reverse die.

Date grid: L5, .006" 140 reeds only Typical diameter = 1.210" Rarity: EDS - 4
LDS - 5

Drapery die state: Full, None Foot support: Strong Dentils: Obverse - Full; Reverse - Full
Grade of coins depicted: AU50 Coins from the Bill Bugert Collection

Cross reference: WB-101. Version 2.34

# 1856-S WB-4, Large S

Obverse 4

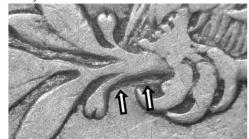


- Date right slanting down slightly to the right (photo)
- Recut stars 4 and 10-12
- Unfinished under Liberty's chin





Large S mintmark below the crotch, almost touching the olive stem, and tilted to the left (photo)



- LDS: heavy horizontal die lines below the olive leaves and buds (photo). These are not found on EDS coins.
- Die line lateral to the Dentils above (AM)ER(ICA) are not visible when paired with this obverse die.
- Weak bottoms of vertical shield lines C1-3
- Unfinished between olive leaves

This variety can be readily identified in late die states by the horizontal lines below the olive leaves and buds. In early die states, these lines are not evident.

This is the first use of this obverse die and the second use of this reverse die.

Date grid: M1.5, .010"	140 reeds only		Typical diameter = 1.203"		r = 1.203"	Rarity - 5
Drapery die state: Full Foot support		t: Strong	Dent	tils: Obverse - Fu	ull; Reverse - Full	
Grade of coin depicted: F12					Coin from the E	Bill Bugert Collection
Cross reference: WB-101.						Version 2.34

## 1856-S WB-5, Large S

Obverse 4



- Date right slanting down slightly to the right and with a lump on the 1 similar to obverse 1 (photo)
- LDS: fine die crack from the top of Liberty's cap to star 8
- Recut stars 4 and 10-12
- Unfinished under Liberty's chin

**Reverse C** 



• Large S mintmark to the left of center of the crotch (photo)



 Horizontal die line in the eagle's tail feathers below the arrow feathers (photo)



- Tiny vertical die lines along the upper left edge of the eagle's wing (photo)
- This reverse die is transitional with 1857-S.

This is the second use of this obverse die.								
Date grid: M2, .013" 140 reeds only			Typical	diameter = 1.209"	Rarity - 4			
Drapery die state: Full	Foot support:	Weak	Dentils: Obverse - Full; Reverse - Full					
Grade of coin depicted: AU:	55		Coin from the Bill Bugert Collection					
Cross reference: WB-101.				Version 2.34				

## 1856-S WB-6, Large S

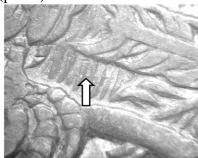
Obverse 5



- Centered date punched lower than any other 1856-S obverse die (photo)
- Recut stars 4, 5, 7, and 10-12



• Large S mintmark to the left of center of the crotch (photo)



- Horizontal die line in the eagle's tail feathers below the arrow feathers (photo)
- The tiny vertical die lines along the upper left edge of the eagle's wing found on die marriage WB-5 are not visible here.
- This reverse die is transitional with 1857-S.

#### 1857-S

This low mintage date, the third year of mintage for half dollars from the new San Francisco Branch Mint, is a scarce date popular with collectors for the mintmark sizes and blundered date. All 1857-S half dollars have either a large S or medium S mintmark; the large S is scarcer than the medium S especially in XF or above. This is the first year that the medium S size mintmark was introduced at the San Francisco branch mint.

Four die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	12	12	2
158,000	Shipped	-	12	12	(129, 140)
	Known	4	4	3	(138, 140)

1857-S		Die lines in feathers below shield	Die line between (STA)TE(S)	Crossed die lines under left wing	
Obverse and Reverse die identification keys		Large S	Medium S		
		A DSS	B		
Date high and right, lump in rock, heavily recut stars 7-13	1	WB-1			
Low date, lump in rock	2	WB-2			
Blundered date, gash in Liberty's foot support	3		WB-3		
Date high and right	4			WB-4	

1857-S date grid quick reference table

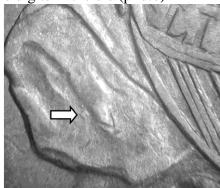
Obverse date grid	Die Marriage
M2, .012"	WB-4
M2.5, .016"	WB-2
M2.5, .016"	WB-3
M3, .010"	WB-1

# 1857-S WB-1, Large S

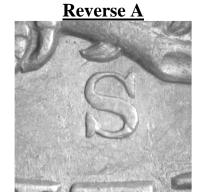
Obverse 1



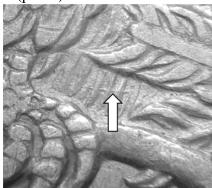
• Date high and right with shallow impressions of the digits in the die (photo)



- Small lump in rock to left of shield (photo) that will not be visible on lower grade coins
- LDS: light clash marks in the drapery below Liberty's elbow
- Heavily recut stars 7-13



• Large S mintmark to the left of center of the crotch (photo)



- Horizontal die line in the eagle's tail feathers below the arrow feathers (photo)
- This reverse die is transitional with 1856-S.
- LDS: clash marks in the lower right shield

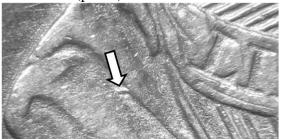
This is the first use of the reverse die in 1857.								
Date grid: M3, 010"	: M3, 010" 140 reeds only		Typical diameter = 1.209"		Rarity - 4			
Drapery die state: Full		Foot support:	Full	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: AU	J50		Coin from the Bill Bugert Collection					
Cross reference: WB-101.				Version 2.34				

## 1857-S WB-2, Large S

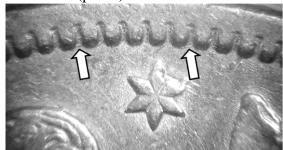
Obverse 2



Date low (photo)



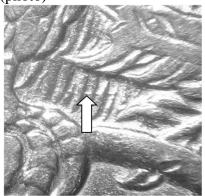
 Heavy short horizontal lump in rock to left of shield (photo)



• File lines in dentils above star 8



• Large S mintmark to the left of center of the crotch (photo)



- Horizontal die line in the eagle's tail feathers below the arrow feathers (photo)
- This reverse die is transitional with 1856-S.
- Clash marks in the lower right shield

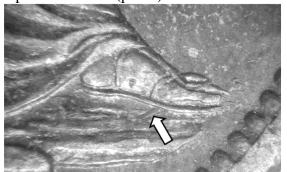
	- The fines in dentils do	O TO BU	ar o							
	This is the second use of this reverse die in 1857.									
Date grid: M2.5, .016" 140 reeds only T				Typical dia	ameter = 1.210"	Rarity - 5				
	Drapery die state: Full Foot suppor			: Weak	Dentils: Obverse - Full; Reverse - Full					
	Grade of coin depicted: X	KF40		Coin from the Bill Bugert Collection						
	Cross reference: WB-101	_				Version 2.34				

#### 1857-S WB-3, Medium S, Blundered Date

#### Obverse 3



• Date low and blundered with the left edge of the serif and the base of an earlier punched 1 in the field to the left of the prominent date (photo)

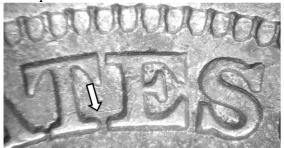


- Heavy diagonal die line in the rock support below the ball of Liberty's foot (photo)
- Recut stars 8 and 10-11





• Medium S mintmark (photo) below the crotch with a position similar to WB-4



• Faint die line connects the lower (STA)TE(S) (photo)

This variety is often not attributed and is one of the two most common die marriages of 1857-S. Examples can be found with some searching.

Some EDS coins appear to have a die crack connecting the 18 at a diagonal on the base of the digits. This line was imparted by the logotype date punch and disappears with die wear. This characteristic is also found on 1857-P and 1857-O half dollars.

Date grid: M2.5, .016"	138 reeds only		Typical diameter = 1.208"		Rarity - 4
Drapery die state: Full		Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: A	AU53		Coin from the Bill Bugert Collection		
Cross reference: WB-103				Version 2.34	

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## 1857-S WB-4, Medium S

**Obverse 4** 

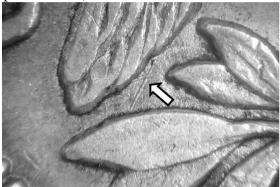


- Date high and left slants down to the right (photo)
- Recut stars 3, 4, and 7-13





Medium S mintmark (photo) below the crotch with a position similar to WB-3. A small vertical tine connects the upper right serif of the S to the olive stem (barley visible in the photo above).



- Heavy crossed die scratches in the recessed area under the eagle's left wing to the left of the upper olive leaves (photo)
- Unfinished under olive leaves

Date grid: M2, .012"	138 reeds only		Typical diameter = 1.211"		Rarity - 4
Drapery die state: Full Foot support			: Strong	Dentils: Obverse - Fu	ıll; Reverse - Full
Grade of coin depicted: XI	F45	Coin from the Bill Bugert Collection			
Cross reference: WB-102.					Version 2.34

#### 1858-S

The San Francisco Branch Mint produced a massive fourteen die marriages in 1858. With a total mintage of less than half a million, each die marriage most likely has a low mintage and many are probably rarer than my estimates. Time will tell. Collecting all the die marriages will take a lot of searching. 1858-S is often priced much higher than the 1859-S and the 1860-S issues. Apparently, they all have similar availability.

Seven of the nine known reverse dies have a Large S mintmark. Seemingly, an 1858-S half with a Medium S mintmarked reverse should be more difficult to find and that is indeed the situation. Most examples seem have the Large S mintmark.

The Type 2 reverse hub introduced on Philadelphia Mint half dollars in 1858 is not seen on San Francisco Branch Mint halves until 1862. Two unrequested reverse dies furnished in March 1858 may have been Type 2; if so, they were not used until 1862.

Fourteen 1858-S die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	12	0*	1
476,000	Shipped	-	8**	2	(129)
	Known	14	10	9	(138)

<sup>\* =</sup> No reverse dies were requested because dies were on hand from previous years.

The date and mintmark positions are very similar with only minute differences on all die marriages. Relying on the date-grid only to determine a die marriage may be frustrating; a combination of the date grid and die diagnostics will ensure correct identification.

1858-S date grid summary reference table

Obverse date grid	Die Marriage
M1, 0.008"	<b>WB-4</b>
M1.5, 0.006"	WB-3
M1.5, 0.010"	WB-8
M1.5, 0.012"	WB-7
M1.5, 0.018"	WB-13
M1.5, 0.020"	WB-10
M2, .012"	WB-6
M2, 0.010"	WB-14
M2, 0.010"	WB-11
M2, 0.013"	WB-9
M2.5, 0.008"	WB-5
M2.5, 0.009"	WB-1
M2.5, 0.009"	WB-2
M2.5, 0.014"	WB-12

<sup>\*\* =</sup> Probably 12 dies but only record of 8 dies.

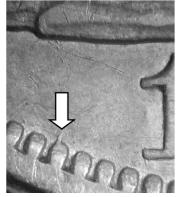
1858-S Obverse and Reverse die identification keys		EDS: Die line in dentils above CA	B Die line in dentils below (H)A(LF)	Diagonal die lines from dentils to tops of letters	D	Diagonal lines in lower recessed area of shield	Pointed tine from dentil above (A)M(ERICA)	Heavy vertical die lines in recessed area of shield	Upper right serif of mintmark touches olive stem	S-6581-1
	T					S			S	
Vertical die line extends from dentil left of 1	1	WB-1	WB-2							
Lump on dentils by star 9	2	WB-3	WB-4							
Multiple digit remnants around gown loop	3			WB-5						
Diagonal die line in Liberty's lap to the left of staff base"	4			WB-6	WB-7	WB-8				
Vertical lines below Liberty's chin	5						WB- 9			
Low date; small raised lump in the recessed area of Liberty's gown loop	6					WB-10				
Curved die line below Liberty's elbow	7						WB- 11			
8 in rock	8							WB- 12		
Rusty die	9								WB- 13	
Centered date	10									WB- 14

## 1858-S WB-1, Large S

**Obverse 1** 



Centered date slants down to right (photo)



- Small vertical tine from the fourth dentil to the left of the 1 in the date (photo)
- Recut stars 3,4,7,10, and 11

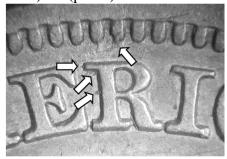




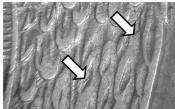
Large S mintmark centered below the crotch (photo)



Thick die lines in the dentils above (AMERI)CA (photo)



Small horn-like tines on the upper left serif of and die roughness above the (AME)R(ICA) (photo)



Die line in right wing (photo) and in eagle's feathers below shield

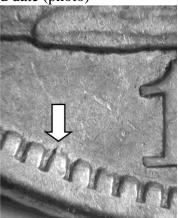
This is the first use of the obverse and reverse dies								
Date grid: M2.5, .009" 138 reeds		eeds	Typical diameter = 1.210" Rarity - 3					
Drapery die state: Full	Foot support:	Full	Dentils: Obverse - Full; Reverse - Full					
Grade of coin depicted: AU	J <b>5</b> 3	Coin from the Bill Bugert Collection						
Cross reference: WB-101.			Version 2.34					

## 1858-S WB-2, Large S

Obverse 1



• Centered date (photo)

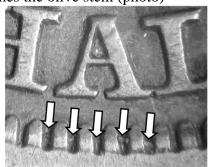


• Small vertical tine from the fourth dentil to the left of the 1 in the date (photo)





• Large S mintmark high in the crotch, tilted to the left, and the upper right serif of the S touches the olive stem (photo)



- Thick die line in the dentils below HAL(F) (photo)
- Weak bottoms C1-3

This is the second use of this obverse die and first use of this reverse die.						
Date grid: M2.5, .009"	ate grid: M2.5, .009" 138 reeds T			cal diameter = 1.209"	Rarity - 3	
Drapery die state: Full	Drapery die state: Full Foot support: Ful			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF40				Coin from the Bill Bugert Collection		
Cross reference: WB-101.					Version 2.34	

## 1858-S WB-3, Large S

Obverse 2

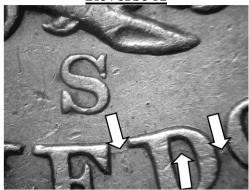


• Date slightly left (photo)



- Lump near dentil above star 9 (photo)
- Recut stars 3, 7, 8, 10, and 11

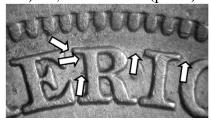
Reverse A



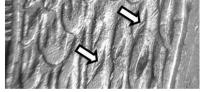
Large S mintmark centered below the crotch;
 (HAL)F DO(L) now cracked (photo)



 Thick die lines in the dentils above (AMERI)CA, now cracked (photo)



 Small horn-like tines on the upper left serif of and die roughness above the (AME)R(ICA), now cracked (photo)



• Die line in right wing (photo) and in eagle's feathers below shield

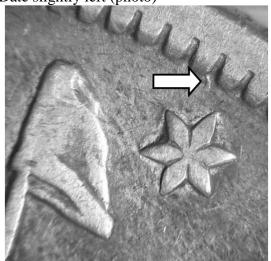
This is the first use of this obverse die and the second use of this reverse die.						
Date grid: M1.5, .006"	grid: M1.5, .006" 138 reeds Ty		Typical diameter = 1.209"		Rarity - 3	
Drapery die state: Full Foot support:		Full	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF45				Coin from the Bill Bug	gert Collection	
Cross reference: WB-101.					Version 2.34	

## 1858-S WB-4, Large S

Obverse 2



• Date slightly left (photo)

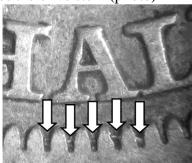


- Lump near dentil above star 9 (photo)
- LDS: die crack from Liberty's head along star 8, cap, to star 9. Another connects the bottoms of the digits in the date.





• Large S mintmark high in the crotch, tilted to the left, and the upper right serif of the S touches the olive stem (photo)

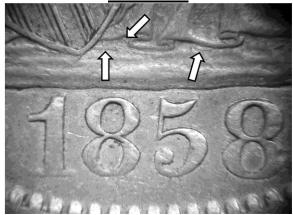


- Thick die line in the dentils below HAL(F) (photo)
- Weak bottoms C1-3

This is the second use of this obverse die and reverse die.						
Date grid: M1, .008"	138 r	eeds	Typical	diameter = 1.206"	Rarity - 3	
Drapery die state: Full Foot suppor		Foot support:	Full	Dentils: Obverse - Ful	ll; Reverse - Full	
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection			
Cross reference: WB-101.					Version 2.34	

## 1858-S WB-5, Large S

Obverse 3



- Centered date with remnants of unknown digits in the rock and Liberty's gown above the date (photo)
- LDS: the left foot of the 1 is very weak.
- Unfinished below Liberty's chin



• Large S mintmark nearly centered below the crotch (photo)



 Many diagonal die lines between the tops of the letters (A)MER(ICA) and the dentils (photo)

This is the first use of this reverse die.

One example seen has reeds too weak to count

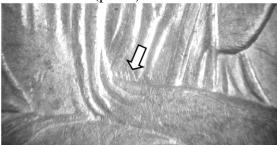
One example seen has reeds too weak to count.						
Date grid: M2.5, .008"	138 r	reeds Typical		diameter = 1.209"	Rarity - 5	
Drapery die state: Full	Full Foot support: Full		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection			
Cross reference: WB-101.					Version 2.34	

## 1858-S WB-6, Large S

Obverse 4



• Centered date (photo)

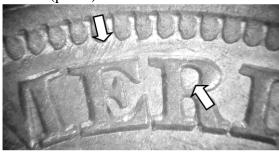


- Vertical die lines in Liberty's lap to the left of the pole (photo)
- Recut stars 3-8, 11, and 12

Reverse C



Large S mintmark nearly centered below the crotch (photo)



• Many diagonal die lines between the tops of the letters (A)MER(ICA) and the dentils (photo)

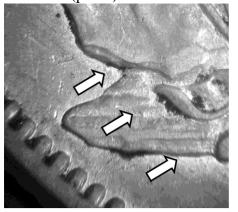
This is the first use of this	obverse die.					
Date grid: M2, .020"	138 reeds	138 reeds Typical diameter = 1.214"			Rarity - 4	
Drapery die state: Full	Foot support:	port: Weak below toe		S	Dentils: Obverse	- Full; Reverse - Full
Grade of coin depicted: N	AS64			Co	oin from the Randy	Wiley Collection
Cross reference: WB-101	.•					Version 2.34

## 1858-S WB-7, Large S

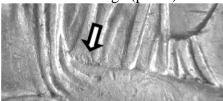
Obverse 4



• Centered date (photo)



 Weak diagonal (NW to SE) die crack bisects the lower left rock edge (photo)

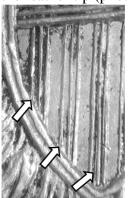


- Vertical die lines in Liberty's lap to the left of the pole (photo)
- Recut stars 3-8, 11, and 12

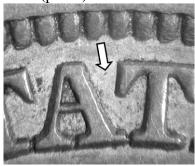




• Large S slightly tilted right and high in the field under the feather tip (photo)



• Split bottom ends of A1 and B1; double C2 shield lines (photo)



• Tiny lump in the field between (ST)AT(TES) (photo)

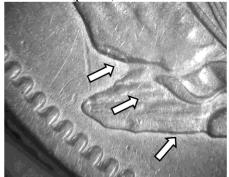
This is the second use of this obverse die and first use of this reverse die.						
Date grid: M1.5, .012"	138 reeds	Typical	diame	eter = 1.209"	Rarity - 3	
Drapery die state: Full	Foot support: Weak toes	71		entils: Obverse - 1	Full; Reverse - Full	
Grade of coin depicted: A	U50		Coin	from the Bill Bug	gert Collection	
Cross reference: WB-101.	_				Version 2.34	

## 1858-S WB-8, Large S

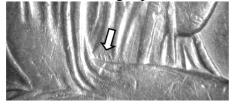
Obverse 4



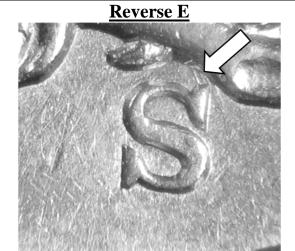
• Centered date (photo)



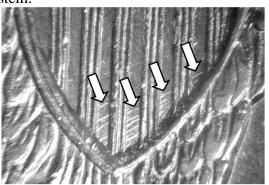
• Weak diagonal (NW to SE) die crack bisects the lower left rock edge (photo)



- Vertical die lines in Liberty's lap to the left of the pole (photo)
- Recut stars 3, 4, 6, 10, and 11
- Unfinished under Liberty's chin



Large S high and under crotch, nearly touching olive stem (photo). Tiny die lines connect upper right serif of mintmark to olive stem



- Many diagonal (SW to NE) die lines in the lower shield (photo)
- Unfinished between olive leaves

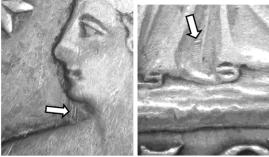
This is the third use of this obverse die and first use of this reverse die.						
Date grid: M1.5, .010"	138 reeds	Typical	diameter = 1.206"	Rarity - 3		
Drapery die state: Full	ıll Foot support: We		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: AU53			Coin from Bill Bugert Collection			
Cross reference: WB-101.				Version 2.34		

## 1858-S WB-9, Large S

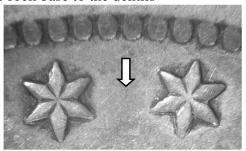
Obverse 5

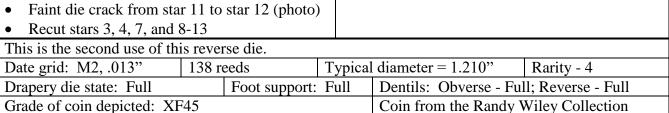


• Date high and to the left (photo)



- Vertical lines below Liberty's chin (above left photo)
- Small lump in Liberty's gown above the folds (above right photo)
- Faint horizontal die crack from the left edge of the rock base to the dentils







• Large S slightly tilted right and high in the field under the feather tip (photo)



• Tiny lump in the field between (ST)AT(TES) (photo)

Version 2.34

• Die crack connects the tops of the letters (A)MERI(CA)

Cross reference: WB-101.

## 1858-S WB-10, Large S

Obverse 6



• Low date (photo)



- Small raised lump in the recessed area of Liberty's gown loop (photo)
- Recut stars 5, 7, 8, and 10





- Large S high and under crotch, nearly touching olive stem (photo). The raised lines touching the upper right serif of the mintmark visible when this reverse is paired with WB-8 are polished away.
- The diagonal die lines in the lower shield visible when this reverse is paired with WB-8 are nearly polished away.
- Weak die crack connects tops of letters (AME)RI(CA)
- Unfinished between olive leaves

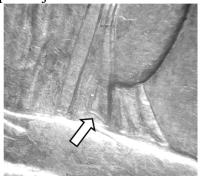
This is the second use of this reverse die.							
Date grid: M1.5, .020"	13	88 reeds	Typical	diameter = 1.209"	Rarity - 3		
Drapery die state: Partial		Foot support: Weak		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF40			Coin from the Bill Bugert Collection				
Cross reference: WB-101.				Version 2.34			

#### 1858-S WB-11, Medium S

Obverse 7



- Centered date weakly impressed (photo)
- EDS: lump on the top of the 1 in date where the top serif joins the left side of stand

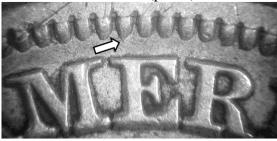


• Curved die line in the drapery below Liberty's elbow (photo)





 Medium S mintmark nearly centered in the field below the crotch (photo)

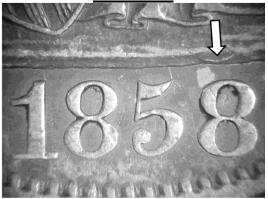


- Pointed tine from the tip of the dentil towards the left edge of the stand of the (AM)E(RICA) (photo)
- Deeply impressed eagle and inner edges of the letters of the denomination and legend.
   The outer edges of the letters are shallower.
- Unfinished between olive leaves, claws, and arrow heads

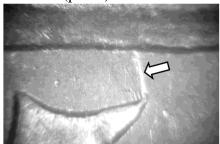
Date grid: M2, .010"	138 r	eeds	Typical	diameter = 1.210"	Rarity - 3
Drapery die state: Full Foot support:		Full	Dentils: Obverse - Ful	l; Reverse - Full	
Grade of coin depicted: XF40			Coin from the Bill Bugert Collection		
Cross reference: WB-102.				Version 2.34	

#### 1858-S WB-12, Medium S, 8 in rock

**Obverse 8** 



• Centered date; the bottom curve of an errant 8 can be found in the rock above the second 8 of the date (photo)

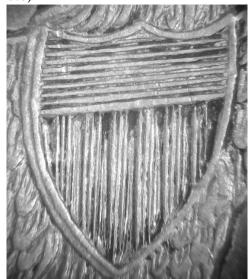


 Tine from the tip of the upper right serif of the 5 to the rock support (visible in both photos above)





Medium S high in the field below the crotch (photo)



- EDS: heavy vertical die lines in the recessed area between the shield lines (photo)
- LDS: few die lines in the shield remain after the die was polished.
- Two short, faint tines from the dentils to the letters DO(L)
- Deeply impressed eagle and inner edges of the letters of the denomination and legend. The outer edges of the letters are shallower.
- Unfinished under the letter (A)M(ERICA)

Date grid: M2.5, .014"	138 reeds	Typical	diameter = 1.210"	Rarity - 3	
Drapery die state: Full to	Foot support: Miss	sing	Dentils: Obverse - Full; Reverse - Full		
partial	under toes		Dentils. Obverse - Full, Reverse - Full		
1			Coin from the Bill Bugert Collection		
Cross reference: WB-103, MPD-001.				Version 2.34	

# 1858-S WB-13, Large S

Obverse 9



• Low date (photo)

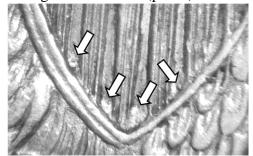




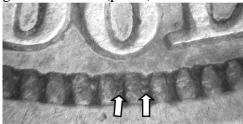
- Heavily rusted die evident on the figure of Liberty (above two photos)
- Recut stars 10 and 11



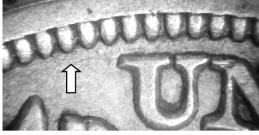
• Large S mintmark with the upper right serif touching the olive stem (photo)



• Unfinished die (rough areas) on inside lower edge of the shield (photo)



• Die lines in the dentil below (D)O(L) (photo)



• Faint die crack from the upper left serif of the U(NITED) left to the dentils (photo)

Date grid: M1.5, .018" 1	38 reeds	Typical diameter	= 1.212"	Rarity - 3	
Drapery die state: Full Foot support: Weak		eak Dentils:	Dentils: Obverse - Full; Reverse - Full		
			Coin from the Bill Bugert Collection		
Cross reference: WB-101.			Version 2.34		

## 1858-S WB-14, Large S

Obverse 10



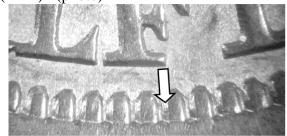
• Centered date (photo) similar to WB-1 but



- Lump below the hair curl (photo)
- All stars heavily recut



• Large S high and centered above the letter (HAL)F (photo)



- File lines in the dentils below (HAL)F (photo)
- This die is transitional with 1859-S.

Date grid: M2, .010"	138 reeds	Typical diameter = 1.211"	Rarity - 3	
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full		
Grade of coins depicted: E	Sugert XF40; Wiley AU58	Coins from the Bill Bugert Collection and the Randy Wiley Collection		
Cross reference: WB-101.			Version 2.34	

#### 1859-S

1859-S is a better date in the Liberty Seated half dollar series. With a low mintage, the Branch Mint continues with its series of low mintage dates that started in 1855. These halves are not routinely seen on the market and collecting all the die marriages of this date will be challenging. Two mintmark sizes are found in 1859-S: Large and Medium. Although only one of the reverse dies for this date has a Medium S mintmark, this die marriage can be located.

In 1859, the style of the 1 in the date changed from a blunt shaped upper left serif to a downward hooked shaped upper left serif.

Eight die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	12	0	2
566,000	Shipped	-	12	0	(129 120 140)
200,000	Known	8	6	7	(138, 139, 140)

1859-S Obverse and Reverse die identification keys		Large S Transitional with 1858- S	Laı Close	Large S Cracked reverse	Large S Diagonal lines in leaves	Large S Tilted to right; Lines below right wing and in lower right	M	Large S Close to stem
Keys		A	B	C	D	E	F	G
Date right with tine on the 1	1	WB-1						
Shallow date; lump by star 13	2		WB-2	WB-3				
Date left, lines below sandal	3				WB-4			
Centered date; Tine on upper serif of 1	4					WB-5		
Centered date	5						<b>WB-6</b>	
Recut date "Spiked foot"	6						WB-7	WB-8

1859-S date grid summary reference table

	<i>U</i>
Obverse date grid	Die Marriage
L5.5, .024"	WB-4
M1, .022"	WB-2
M1, .024"	WB-3
M1.5, .023"	WB-8
M1.5, .024"	WB-6
M1.5, .026"	WB-7
M2, .018"	WB-5
M2, .020"	WB-1

## 1859-S WB-1, Large S, Recut 1

Obverse 1

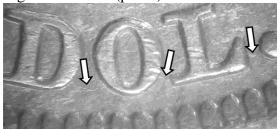


- Date right with a small tine on the upper left serif of the 1 (photo). This tine is usually visible on EDS to MDS coins.
- LDS: light clashing in the drapery below the elbow
- Recut stars 1-6 and 10-13

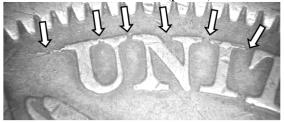
**Reverse A** 



Large S mintmark (photo)



MDS to LDS: Small die crack along the bottoms of the letters HALF DOL. (photo)



- Very LDS: die crack along the tops of letters UNIT (photo)
- Unfinished below olive leaves
- This die is transitional with and first used in 1858-S.

Date grid: M2, .020"	EDS to LDS:	MDS: 138 reeds 139 reeds	Typical diameter = 1.212"	Rarity - 3
Drapery die state: Full Fo		support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: EDS – AU55, LDS - XF40			EDS coin from the Bill Bugert Collection	
Grade of confidepicted.	EDS – A	755, LDS - AF40	LDS coin from the Randy Wiley Collection	
Cross reference: WB-101.			Version 2.34	

#### 1859-S WB-2, Large S, Errant 9 in Rock

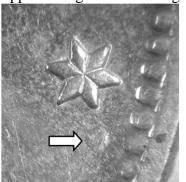
**Obverse 2** 



Shallow date left with a elongated lump on the top of the 1 and an errant 9 in the rock base above the 9 (photo). The lump fades with lower grades as does the 18.



LDS: diagonal (NW to SE) die crack thru rock support along the ribbon edge (photo)

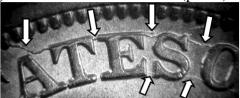


Lump in field below star 13 (photo). The lump fades with die state and lower grade.



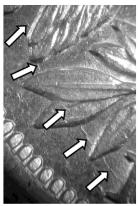


Large S mintmark close to stem (photo)



LDS: die cracks from dentils above (ST)A(TES) along tops of letters TES O (above photo) and along tops of (UNIT)ED ST(ATES) (below photo)





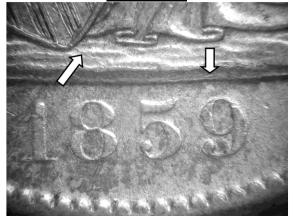
LDS: die crack from the H(ALF) thru the olive leaves to the left wing tip (photo)

- T-11 •	• .1	C*	C .1 .	1	1.
Thic	10 th/	e first use	Of thic	Ohvorco	dıa
11115	12 1116	2 1119F USC	OI HIIS	ODVELSE	uic.

Date grid: M1, .022" 139 r		139 reeds		Typical diameter = 1.209" Rarity	
Drapery die state: Full		Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS65			Coin from the Randy Wiley Collection		
Cross reference: WB-101.					Version 2.34

#### 1859-S WB-3, Large S

Obverse 2



Shallow date left; as on variety WB-2, with the lump on the top of the 1 and the errant 9 in the rock base (photo). Weak 18 and die crack from shield tip



Diagonal (NW to SE) die crack thru rock support along the ribbon edge (photo)



- Die crack from Liberty's foot instep (photo)
- Lump by star 13 on variety WB-2 not visible

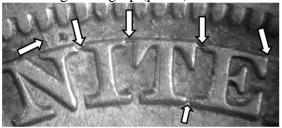




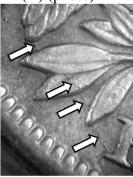
Large S mintmark touches stem (photo)



Die cracks along the base of letters (STATE)S OF A to right wing tip (photo)



Die crack from a dentil above N along tops of letters (U)NITE(D) (photo)



Die crack from the H(ALF) thru the olive leaves to the left wing tip (photo). Note this die crack is very similar to variety WB-2.

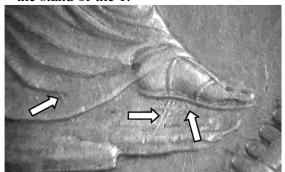
		<u> </u>				
This is the second use of this obverse die.						
Date grid: M1, .024"	139 reeds	Typical diameter = 1.211"	Rarity - 3			
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Weak; Reverse - Weak				
Grade of coin depicted: A	AU50	Coin from the Randy Wiley Collection				
Cross reference: WB-101	l.		Version 2.34			

## 1859-S WB-4, Large S

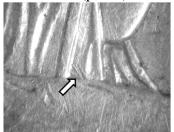
Obverse 3



• Date left (photo). Tiny lump on the top of the stand of the 1.



• Slanted lines from Liberty's sandal into the rock support and in Liberty's gown to the left of the heel (photo)



- Sunray-like lines in Liberty's lap near the pole base (photo)
- Diagonal die crack in the rock support near the ribbon end

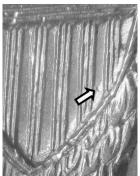




• Large S mintmark slightly higher than WB-1 and very close to the stem (photo)



- Three raised lines along a diagonal between the olive leaves (photo)
- Die crack along the top of letters UNITED STATES



• Tiny die line in the lower right recessed area of the shield (photo)

Date grid: L5.5, .024"	139 r	reeds	Typical diameter = 1.207" Rarity - 3
Drapery die state: Full Foot suppo		Foot support: Weak	Dentils: Obverse - Full; Reverse - Full
Grade of coin depicted: AU53			Coin from the Randy Wiley Collection
Cross reference: WB-101.			Version 2.34

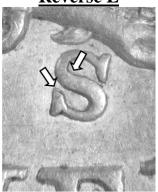
## 1859-S WB-5, Large S

Obverse 4

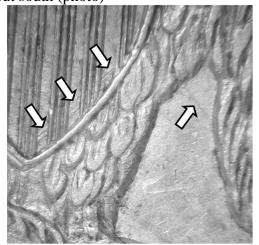


- Date right with a tiny tine on the upper right serif of the 1 (photo)
- Recut stars 2, 3, 4, 5, 7, 8, and 9-13

Reverse E



Large S mintmark tilted to the right and slightly recut south (photo)



• Heavy die lines along the lower inside right edge of the shield and under the right wing (photo)

Date grid: M2, .018"	139 reeds		Typical diameter = 1.211" Rarity - 4
Drapery die state: Full Foot		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full
Grade of coin depicted: AU50			Coin from the Randy Wiley Collection
Cross reference: WB-101.			Version 2.34

## 1859-S WB-6, Medium S

Obverse 5

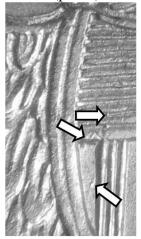


- Centered date (photo)
- EDS to LDS: light clash in drapery

**Reverse F** 



Medium S mintmark centered below the crotch and tilted to the left (photo)

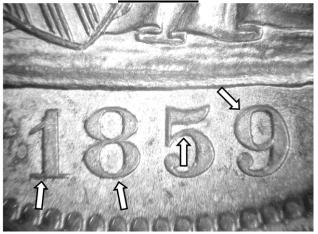


- Vertical shield line A1 extends into the upper three horizontal shield lines (above photo)
- EDS to LDS: die clash in the lower right shield and in the field above the right claw
- LDS: diagonal die lines in the upper left corner of the horizontal shield lines and lump in recessed area adjacent to A1 (above photo)

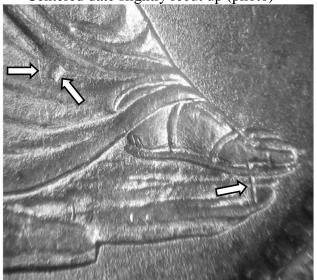
This is the first use of this reverse die.						
Data amid: M1.5 024"	EDS: 139 reeds	Tymical diameter = 1.216"	Domitry 2			
Date grid: M1.5, .024"	LDS: 140 reeds	Typical diameter = 1.216"	Rarity - 3			
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: I	EDS ALISO	EDS: Coin from the Bill Bugert Collection				
Grade of confidepicted. I	EDS - AU30	LDS: Coin from the Randy Wiley Collection				
Cross reference: WB-102	2.		Version 2.34			

#### 1859-S WB-7, Medium S, Recut 1859

Obverse 6



• Centered date slightly recut up (photo)

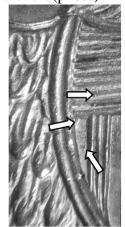


- "Spiked foot" vertical die line extends down from the ball of Liberty's foot (photo)
- Lump in Liberty's gown to the upper left of the foot and a vertical line in the gown to the left of this lump (above photo)

Reverse F



Medium S mintmark centered below the crotch and tilted to the left (photo)



- Vertical shield line A1 extends into the upper three horizontal shield lines (above photo)
- Diagonal die line in the upper left corner of the horizontal shield lines and lump in recessed area adjacent to A1 (above photo)
- Die crack along the base of letters OF A(MERICA)
- Clash in lower right shield nearly gone
- Unfinished under olive leaves

This is the second use of this reverse die and the first use of this obverse die.

Date grid: M1.5, .026"	140 reeds	Typical diameter = 1.211"	Rarity - 3
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Full; Rev	erse - Weak
Grade of coin depicted: N	AS63	Coin from the Randy Wiley	Collection
Cross reference: WB-102			Version 2.34

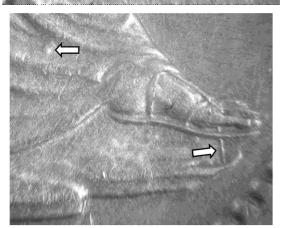
## 1859-S WB-8, Large S, Recut 18

Obverse 6



• Centered date with the figures 18 slightly recut up (photos above and below)

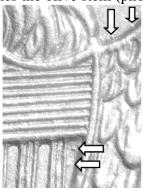




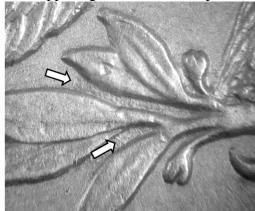
- "Spiked foot" vertical die line extends down from the ball of Liberty's foot (photo)
- Lump in Liberty's gown to the upper left of the foot (above photo)



• Large S mintmark centered below the crotch barely touches the olive stem (photo)



• Three small lumps along the upper right wing near the upper right shield corner (photo)



- Unfinished under olive leaves with a few scattered heavy lines (photo)
- This die is transitional with 1860-S.

This is the second use of this obverse die.

Date grid: M1.5, .023"	Oate grid: M1.5, .023"   140 reeds		Rarity - 4
Drapery die state: Partial	Foot support: Strong	Dentils: Obverse - Weak; Reverse - Full	
Grade of coin depicted: A	.U50	Coin from the Randy Wiley Collection	
Cross reference: WB-101		Version 2.34	

All 1860-S half dollars have either a large S or medium S mintmark; the medium S variety is slightly scarcer of the two.

Two obverse dies and two reverse dies pair to produce two marriages. Both dies are transitional with another year: the large S mintmarked die is transitional with 1859-S and the medium S mintmarked die is transitional with 1861-S.

With a mintage of 472,000 and two marriages, simple arithmetic division says an average of 236,000 coins was struck per die pair. Various numismatic sources say that dies of this era will last that long. However, if you scrutinize coins of the same mint and approximately the same date, you will find that dies were not typically used that long. For example, varieties of the 1857-S half dollar, with a mintage of 158,000, has four obverse and three reverse dies, the 1855-S, with a mintage of 129,950, has four obverse and two reverse dies, and there are other similar examples. Die wear is known but die cracks are not for 1860-S half dollars. This leads me to believe that other 1860-S dies exist that have not yet been properly identified. After decades of searching, Randy Wiley and I have been unable to find another die marriage. When and if one is found, it will likely be very rare. Alternately, the established 1860-S mintage figure could also include some 1859-S or 1861-S half dollars. Theoretically, this could account for the low number of 1860-S dies seen.

Some high grade 1860-S half dollars were contained in the Guatemala hoard and can be identified by their harsh baking soda-like cleaned surfaces. For more information, see the miscellaneous information section.

The two die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known	
	uies	Marriages	Dies	Dies	Kilowii	
472,000	Requested	-	Unknown	Unknown	1	
	Shipped	-	Unknown	Unknown	(140)	
	Known	2	2	2	(140)	

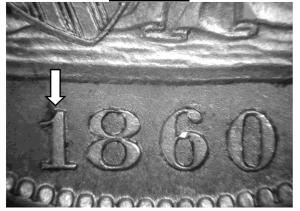
1860-S	Large S	Medium S	
Obverse and Reverse di identification keys	A	B	
Lump off top of 1	1	WB-1	
Date slightly right	2		WB-2

#### 1860-S date grid quick reference table

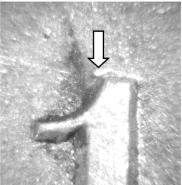
Obverse date grid	Die Marriage
M1, .032"	WB-1
M2, .030"	WB-2

# 1860-S WB-1, Large S

Obverse 1



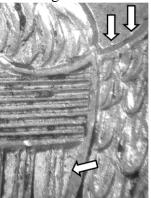
• Date left when compared with obverse 2 (photo)



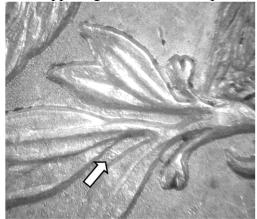
- Small lump off the top of the 1 (photo). This lump is weak but visible even on LDS coins.
- Recut stars 3-11
- LDS: weak dentils



Large S mintmark centered below the crotch and nearly touching the olive stem (photo)



• Three small lumps along the upper right wing near the upper right shield corner (photo)



- Unfinished under olive leaves with a few scattered heavy lines (photo)
- This die is transitional with 1859-S.

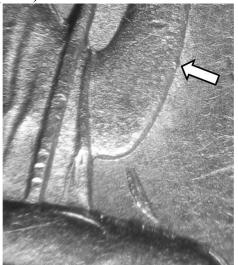
Date grid: M1, 032"	140 reeds		Typical diameter = $1.206$ "		Rarity - 3	
Drapery die state: Full		East supports	HIIII	Dentils: Obverse - Full; Reverse - Full		
		Foot support:		LDS: both are severely abraded.		
Grade of coin depicted: MS61				Coin from the Bill Bug	gert Collection	
Cross reference: WB-101.					Version 2.34	

## 1860-S WB-2, Medium S

Obverse 2



• Date slightly more to the right than WB-1 (photo)

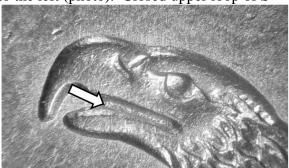


- Tiny lump on the outside of Liberty's forearm (photo) visible on high grade coins only
- Short line from star 7 towards Liberty's shoulder
- Normally found with partial drapery under the elbow (thin outer line only as in above photo).
- Rare EDS: full drapery and heavily clashed obverse (wing outline in right obverse field)
- Recut stars 3-11





 Medium S mintmark under the crotch and tilted to the left (photo). Closed upper loop of S



• Unfinished with a vertical die line in the eagle's mouth (photo)



- File mark between the upper right wing and (A)M(ERICA) (photo)
- Rare EDS: slightly recut mintmark (see *Gobrecht Journal*, Issue 52, page 39)
- Weak bottoms of C1-3
- This die is transitional with 1861-S.

Date grid: M2, .030" 140 reed		ds only	Typical diameter = 1.209"		Rarity - 3	
Drapery die state: Full to Partial Foot support: We			ort: Weak	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS63				Coin from the Randy	Wiley Collection	
Cross reference: WB-102				Version 2.34		

#### 1861-S

After six years of minting Liberty Seated Half Dollars at the San Francisco Branch Mint, the Mint doubled its usual coinage of half dollars but with a price; the coins of 1861-S suffer from weak strikes, die stress, heavily broken and crumbling dies, and clashed dies.

Two mintmark sizes are known for 1861-S; reverses with a medium and a large S mintmark. All have a type 1 reverse hub. Half dollars with the medium S are scarcer than those with a large S.

Some high grade 1861-S half dollars were contained in the Guatemala hoard and can be identified by their harsh baking soda-like cleaned surfaces. For more information, see the miscellaneous information section.

Ten die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known	
939,500	Requested	-	Unknown	Unknown	2	
	Shipped	-	6	0	(120, 140)	
	Known	10	6	5	(139, 140)	

1861-S Obverse and Reverse die identification		Vertical die line in eagle's mouth; Transitional with 1860-S	Die line in dentils above (AMER)ICA; Die crack along olive leaves	Mintmark touches olive stem; extensively cracked die; LDS: cuds on eagle's right wing	Mintmark almost touches stem	Mintmark high but lower than the others; Horizontal die lines in eagle's left claw to lower olive berry
keys	keys		Mintmark	Large S Mintmark		
		A	B	C	D	E
Date low and left	1	WB-1		WB-7	<b>WB-6</b>	
Date centered	2		WB-2	WB-3		
Date low and right	3		WB-5		<b>WB-4</b>	
Date low and left	4			WB-8		
Date centered; die crack from Liberty's instep to star 13	5					WB-9
Date high	6					WB-10

1861-S <u>Date-grid summary reference</u> table

Obverse date-grid	Die Marriage
M2, .026"	WB-8
M2, .028"	WB-6
M2.5, .026"	WB-9
M2.5, .028"	WB-1
M2.5, .030"	WB-7
M2.5, .031"	WB-2
M2.5, .033"	WB-5
M2.5, .034"	WB-10
M2.5, .034"	WB-3
M3, .030"	WB-4

## 1861-S WB-1, Medium S

#### Obverse 1

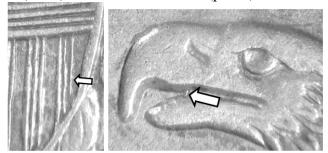


- Date slightly low and left (photo)
- Weak dentils around entire circumference
- Recut stars 6, 7, and 11

#### Reverse A



 Medium S mintmark high in the field above (HAL)F and tilted to the left (photo)



- Weak vertical shield line F3 (above left photo) and vertical die line in eagle's mount (above right photo)
- Weak dentils around entire circumference
- This die is transitional with 1860-S

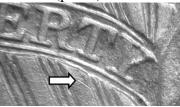
This is the first use of this obverse die.						
Date grid: M2.5, .028"   140 reeds   Typical diameter = 1.213"   Rarity -						
Drapery die state: Full Foot support: Full to weak Dentils: Obverse - Weak; Revers						
Grade of coin depicted: A	AU50	Coin from the Bill Bugert Collection				
Cross reference: WB-102	2.		Version 2.34			

#### 1861-S WB-2, Medium S

Obverse 2



• Centered date (photo)



• File line in the recessed area of the shield below the letters (LIBE)RT(Y) (photo)

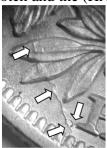


- Clash lines in the drapery below Liberty's elbow (photo)
- Recut stars 2-7 and 11-12

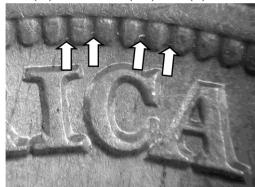
Reverse B



 Medium S mintmark centered in the field between the crotch and the (HAL)F (photo)



 Die crack from the eagle's lower left wing tip thru the olive leaves to the dentil below H(ALF) (photo). Other cracks dentils at left to UNITE(D) and above (ST)ATE(S)



- Heavy die line in the dentils above (AMER)ICA (photo)
- Heavily clashed die
- Die unfinished under upper berry

This is the first use of this obverse die and the first use of this reverse die.

Date grid: M2.5, .031" | 140 reeds | Typical diameter = 1.214" | Rarity - 4

Drapery die state: Partial | Foot support: Strong | Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: MS62 | Coin from the Randy Wiley Collection

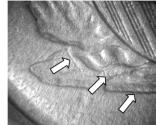
Cross reference: WB-102. | Version 2.34

## 1861-S WB-3, Large S

Obverse 2



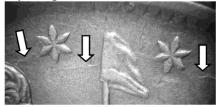
• Centered date (photo) now with worn digits





This is the second use of this obverse die and first use of this reverse die

- Die cracks in rock support to the left of the ribbon (above left photo)
- Clash marks in the drapery below Liberty's elbow (above right photo) and to the left of Liberty's right hand

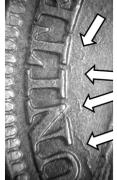


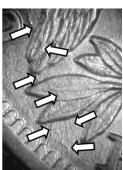
• VLDS only: die crack from Liberty's head to star 8 to the cap to stars 9-10 (photo)



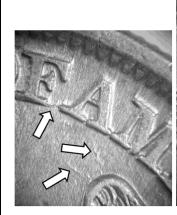


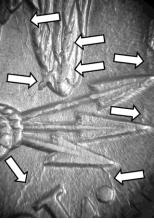
• Large S mintmark with upper right serif touching the olive stem (photo)





 Heavily crack die in and around the entire circumference; most obvious on the olive leaves and left wing (photo), arrow heads and lower right wing tip; three large cuds on lower right wing (photo)





This is the second use of this obverse the and first use of this reverse the.							
Date grid: M2.5, .034"	140 reeds with 2 collar join	nts	Typical diameter = 1.215"	Rarity - 3			
Drapery die state: Partial Foot support: Weak Dentils: Obverse - Weak; Reverse - Weak							
Grade of coin depicted: AU58 Coin from the Bill Bugert Collection							

Cross reference: WB-101. Version 2.34

## 1861-S WB-4, Large Recut S

Obverse 3



• Slightly low date and right (photo)



- Large S with a recut upper right serif (photo). This mintmark almost touches the olive stem.
- EDS only: diagonal die lines between the dentils and (HA)L(F) (photo)

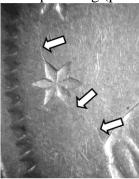
This is the first use of this obverse die and the first use of this reverse die.						
Date grid: M3, .030"	140 reeds with 2 collar joints Typical diameter = 1.210" Rarity - 3					
Drapery die state: Full to weak	)	Dentils: Obverse - Full; Revo	erse - Full			
Grade of coin depicted: XF45			Coin from the Bill Bugert Co	llection		
Cross reference: WB-101.				Version 2.34		

## 1861-S WB-5, Medium S

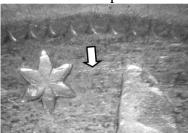
Obverse 3



• Date slightly low in the field and right; weak from die polishing (photo)



• Die crack from star 2 thru star 1, the rock, (photo) thru the ribbon to the rock base to the left of the shield tip

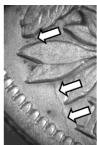


- Die crack from star 8 to the tip of Liberty's cap (photo)
- Die crack from star 11 to 12



• Medium S mintmark centered in the field between the crotch and the (HAL)F. Light vertical die line bisects the left side of the mintmark (photo)





- Light horizontal die line bisects (AMER)ICA. Heavy die line in the dentils above (AMER)ICA (above left photo).
- Die crack from the eagle's lower left wing tip thru the olive leaves to the dentil below H(ALF) (above right photo)
- Lightly clashed die
- Unfinished die under upper berry

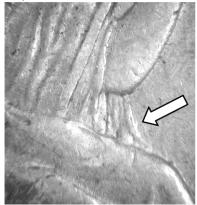
This is the second use of this obverse die and second use of this reverse die.					
Date grid: M2.5, .033"	140 reeds with 2 collar joints	Typical diameter = 1.214"	Rarity - 4		
Drapery die state: Partial	Foot support: Weak	Dentils: Obverse - Weak; Reverse - Full			
Grade of coin depicted: X	XF45	Coin from the Bill Bugert Collection			
Cross reference: WB-102	•		Version 2.34		

## 1861-S WB-6, Large S

Obverse 1



Date slightly low; rock support, dentils, and digits very weak from die polishing (photo)



- Clash die marks in drapery below Liberty's elbow (photo)
- EDS: no obverse cracks
- LDS: die cracks from stars 5-6; star 8 to cap to star 9; stars 9-13





Large S with a recut upper right serif (photo). This mintmark almost touches the olive stem.





- Extensive reverse die cracks: around the tops of the letters UNITED (above left photo), bottoms of letters AMERICA, and DOL, rim to (UNI)T(ED), and thru arrow heads (above right photo)
- Compass point "hole" at top of shield lines A1-3, weak bottom shield lines F1-3, and clash in lower right shield

This the second use of this obverse die and second use of this reverse die.					
Date grid: M2, .028" 140 reeds Typical diameter = 1.207" Rarity - 3					
Drapery die state: Partial Foot support: Strong Dentils: Obverse - Weak; Reverse - Full					
Grade of coin depicted: XF45 Coin from the Bill Bugert Collection					
Cross reference: WB-101			Version 2.34		

#### 1861-S

#### WB-7, Large S

Note: this variety needs a lot of explaining and consequently consumes two pages.

#### Obverse 1



- This die marriage is the third use of this obverse die.
- Date slightly low; rock support and digits now very weak from die polishing. Die crack diagonally thru left rock base; clash die marks in drapery below Liberty's elbow
- Die cracks from stars 5-6; star 8 to cap to star 9; stars 9-13
- Weak dentils around entire circumference
- Weak stars 1-2 and 12-13

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## 1861-S WB-7, Large S

#### **Reverse C**



- Large S mintmark with upper right serif touching the olive stem
- Heavily crack die in and around the entire circumference; most obvious on the olive leaves, left wing, arrow heads and lower right wing tip; three large cuds on lower right wing.
- Split vertical shield line E3 and die crack from right wing tip to A(MERICA).

This is the third use of this obverse die and the second use of this reverse die.

Date grid: M2.5, .030" | 140 reeds with 2 collar joints | Typical diameter = 1.213" | Rarity - 6

Drapery die state: Partial | Foot support: Weak | Dentils: Obverse - Weak; Reverse - Weak

Grade of coin depicted: AU55 | Coin from the Bill Bugert Collection

Cross reference: WB-101. | Version 2.34

## 1861-S WB-8, Large S

Obverse 4



Date low and left (photo)



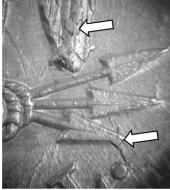
• Line in lower loop of (LI)B(ERTY) and small lump at the end of the scroll (photo)





• Large S mintmark with upper right serif touching the olive stem (photo)





- Heavily crack die in and around the entire circumference; most obvious on the olive leaves, left wing, (above left photo) arrow heads and lower right wing tip; three large cuds on lower right wing (above right photo)
- This die has to be in its terminal die state. It is extensively cracked around the circumference, in the fields, and has large cuds as shown in the above photographs. Die stress lines appear in the fields below the letters in the legend and denomination.

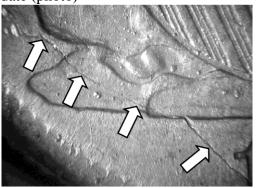
This is the third and final use of this reverse die.						
Date grid: M2, .026" 139 reeds Typical diameter = 1.214" Rarity - 6						
Drapery die state: Full	Dentils: Obverse - Full; Revo	erse - Full				
Grade of coin depicted: AU58				Coin from the Randy Wiley (	Collection	
Cross reference: WB-101.					Version 2.34	

## 1861-S WB-9, Large S

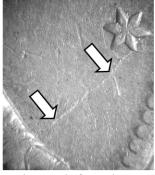
Obverse 5



 Centered date with no dentils below the date (photo)



 Heavy diagonal die crack from the left upright of the 1 thru the rock base into the field to the left of the rock (photo)

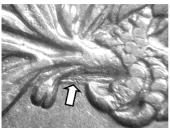




• Die crack from instep of Liberty's foot to star 13 (above left photo). Die crack from star 10 thru star 11 to star 12 (above right photo)

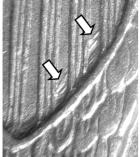


Large S high in the field centered above (HAL)F (photo)



 Horizontal parallel die lines between the left claw and the lower berry (photo)





- EDS only: Die lines from dentils to the tops of the letters (U)NIT(ED) (above left photo). These lines disappeared quickly with advancing die state.
- Diagonal (NE to SW) die lines in the lower right shield (above right photo)
- Die cracks along the base of the letters in the legend

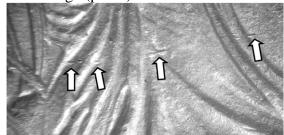
I believe this is the most common 1861-S die marriage. I have not seen the obverse die uncracked.					
Date grid: M2.7, .026"   139 reeds   Typical diameter = 1.213"   Rarity - 2					
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Weak; Reverse - Weak			
Grade of coin depicted: 2	XF45	Coin from the Bill Bugert Collec	tion		
Cross reference: WB-101			Version 2.34		

## 1861-S WB-10, Large S

Obverse 6

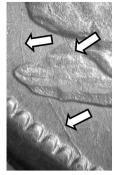


Date high (photo)



Fragmented file line in skirt to right of shield (photo)



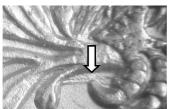


- Die crack from dentil to left of date thru rock support into field (above right photo) to star 1 and star 2 to dentil (above left photo)
- Clash in drapery below Liberty's elbow

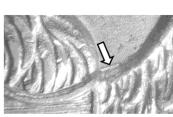


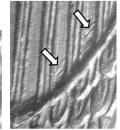


Large S high in the field centered above (HAL)F (photo)

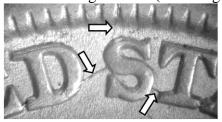


Horizontal parallel die lines between the left claw and the lower berry (photo)





Horizontal die line above right wing by shield (above left photo) and diagonal (NE to SW) die lines in the lower right shield (above right photo)



Die cracks now stronger than those found when paired with WB-9. Most prominent crack is thru UNITED STATES (partial in photo)

This is the second use of this reverse die.

Date grid: M2.5, .034"	139 reeds		Typical diameter = 1.215" Rarity - 4		
Drapery die state: Full	pery die state: Full Foot support: Weak		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58			Coin from the Randy Wiley Collection		
Cross reference: WB-101.			Version 2.34		

#### 1862-S

For all their interesting merits, 1862-S half dollars are vastly under-appreciated. For the following reasons, the die marriages are interesting and worth an aggressive search by the half dollar collector.

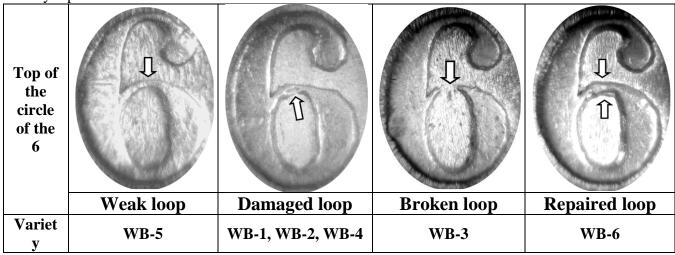
- A new Type 2 reverse hub was introduced at San Francisco in 1862.
- Three different mintmark sizes and styles, Large, Medium, and Small wide broken S, were used at San Francisco in 1862. This year is the first use of the Small wide broken style S.
- There are four variations to the upper loop of the 6 at San Francisco in 1862.
- There are only six die marriages as depicted in the following tables.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	2
1,352,000	Shipped	-	6	2	(139, 140)
	Known	6	5	5	(139, 140)

The Type 2 reverse hub was introduced on San Francisco Branch Mint half dollars with two reverse dies in 1862. Both of these dies have a Small wide broken S mintmark. This new hub was introduced at the Philadelphia Mint in 1858 but was not used until 1862 at San Francisco. The Large and Medium S mintmarked 1862 half dollars with a Type 1 hub were minted using the dies shipped in previous years.

	Type 1 Reverse Hub	Type 2 Reverse Hub
Size Mintmark	Large, Medium	Small wide broken
1862-S variety used	WB-1, WB-4, WB-5, WB-6	WB-2, WB-3

The Engraving Department at the Philadelphia Mint appeared to have problems with the 1862 date logotype punch. A single or multiple punches produced four distinct variations on the top of the circle of the 6 on half dollars minted at the San Francisco Branch Mint. The four variations, weak, damaged, broken, and repaired top of the circle of the 6, are depicted below. It appears the punch started with a weak upper loop, became damaged with use, the upper loop broke away, and finally, was crudely repaired with a hand tool. All four of these variations can be found in 1862.



1862-S Obverse and Reverse die identification		Large S Low below crotch	Small wide broken S high in field Extensively cracked die	Small wide broken S low in field  VLDS: Large raised lump in eagle's wing  Extensively cracked die	Medium S	Large S High and titled
keys		A CO	B	o de la companya de l	D	E
Crack from 1; Damaged loop of 6	1	WB-1	WB-2			
Extensively cracked die; Broken loop of 6	2			WB-3		
Damaged loop of 6	3				WB-4	
Die gouges in Liberty's gown; weak loop of 6	4					WB-5
Repaired loop of 6	5	WB-6				

1862-S date grid quick reference table

Obverse date grid	Die Marriage
M2, 0.018"	WB-3
M2, 0.030"	WB-5
M2.5, 0.020"	WB-1
M2.5, 0.021"	WB-2
M2.5, 0.024"	WB-6
M3, 0.020"	WB-4

Some high grade 1862-S half dollars were contained in the Guatemala hoard and can be identified by their harsh baking soda-like cleaned surfaces. For more information, see the miscellaneous information section.

## 1862-S WB-1, Large S, Damaged 6

#### Obverse 1

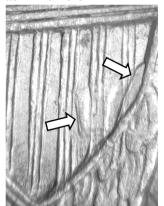


- Centered date with a diagonal (NW to SE) die crack from the upper left serif of the 1 to the rock support (photo)
- Damaged upper loop of the 6 (photo)
- EDS: no die cracks
- LDS: weak dentils (as in above photo)

# Reverse A Type 1 Reverse Hub



- Large S mintmark in the field above the right side of the (HAL)F (photo)
- LDS: fine die line in the upper loop of the S (above photo)
- EDS: no clash in shield



• LDS: heavy die clashes in lower right shield (photo)

This is the first use of this reverse die.						
Date grid: M2.5, .020"	139 reeds		Typical diameter = 1.216"	Rarity - 3		
Duamoury dia states Full Fact symmouts Stuama		De	Dentils: EDS: Obverse - Full; Reverse - Full			
Drapery die state: Full	Foot support: Strong	LDS: Obverse - Weak; Reverse - Weak				
Grade of coin depicted: XF45			Coin from the Bill Bugert Coll	ection		
Cross reference: WB-101.				Version 2.34		

#### 1862-S WB-2, Small wide broken S, Damaged 6

#### Obverse 1



- Centered date with a diagonal (NW to SE) die crack from the outside lower loop of the 8 thru the upper left serif of the 1 to the rock support to the dentils (photo)
- Another die crack from Liberty's toes to the rim at star 13
- Damaged upper loop of the 6
- Very weak or non-existent dentils (as in above photo)

#### <u>Reverse B</u> Type 2 Reverse Hub



• Small wide broken S mintmark <u>high in the field</u> to the lower left of the feather tip (photo). Die cracks along the denomination and to the dentils below (HAL)F.





- LDS: die cracks between the olive leaves and H(ALF) (above left photo) and the crack along the base of (STATE)S OF A(MERICA) (above right photo).
- EDS: no die cracks
- VLDS: the beginning of a retained cud over UNIT(ED)
- Eagle outlined

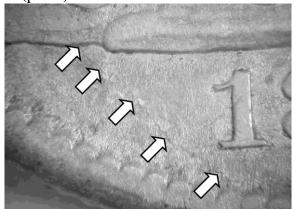
This is the second use of this obverse die.						
Date grid: M2.5, .021"	139 reeds	Typical diameter = 1.216" Rarity - 5				
Drapery die state: Full Foot support: Strong Dentils: Obverse - Weak; Reverse - Full						
Grade of coin depicted: V	/G10	Coin from the Bill Bugert Colle	ection			
Cross reference: WB-103	3.		Version 2.34			

## 1862-S WB-3, Small wide broken S, Broken 6

#### Obverse 2



• High date. Broken upper loop of the 6 (photo)



- Diagonal (NW to SE) die crack from the rock base to the dentils below the 1 (photo)
- Extensive die cracks nearly around the entire circumference of the die

Reverse C Type 2 Reverse Hub



• Small wide broken S mintmark <u>low in the field</u> to the lower left of the feather tip (photo). The upper loop is almost completely broken away.





• MDS to LDS: die cracks from lower left wing tip thru olive leaves to rim (above left photo); another along the tops of letters UNITED STATES OF, from I, E, and F to rim (partial photo above right)



- Rare VLDS: large raised lump in eagle's wing (photo)
- EDS: no die cracks or clash marks

Date grid: M2, .018"	139 reeds	Typical diameter = 1.203"	Rarity - 4
Drapery die state: Full	Foot support: Weak	pport: Weak Dentils: Obverse - Weak; Reverse - Full	
Grade of coin depicted: XF45		Coin from the Bill Bugert Collection	
Cross reference: WB-103.			Version 2.34

#### 1862-S

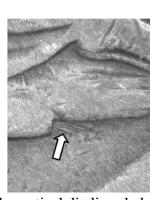
#### WB-4, "Bearded Liberty," Medium S, Damaged 6

Obverse 3



• Centered date. Damaged upper loop of the 6 (photo)



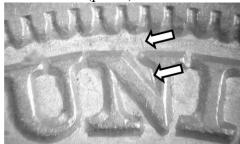


- LDS: a few nearly vertical die lines below Liberty's chin resembling a "Bearded Liberty" (above left photo), diagonal (NW to SE) die lines in the crotch of the rock below Liberty's heel (above right photo), and small vertical oblong lump in Liberty's lap.
- LDS: weak to non-existent dentils
- EDS: clash in the field to the right of Liberty's right elbow
- Recut stars 7-8 and 10-11

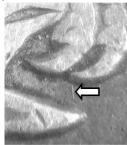
Reverse D
Type 1 Reverse Hub



 Medium S mintmark in the field nearly centered below the crotch (photo)



• EDS: heavy die line in the (U)N(ITED) to the dentil (photo)



- LDS: small vertical die line below the tip of the eagle's middle claw (photo)
- LDS: weak dentils
- Unfinished under leaves

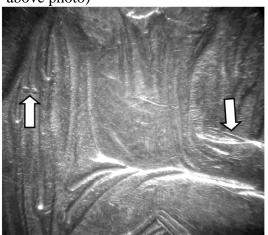
EDS: both dies heavily clashed; these clash lines were polished off the die in later die states.					
Date grid: M3, .020"	te grid: M3, .020" 139 reeds Typical diameter = 1.206" Rarity -				
Drapery die state: Full	Full Foot support: Strong Dentils: EDS: Obverse - Full; Reverse - Full LDS: Obverse - Weak; Reverse - Weak				
Grade of coin depicted: EDS: XF45, LDS: VG10			Coins from the Bill Bugert Co	llection	
Cross reference: WB-102.				Version 2.34	

#### 1862-S WB-5, Large S, Weak 6

Obverse 4



- Low date (when compared to the other dies in 1862-S) (photo)
- Weak upper loop of the 6 in the date (see above photo)

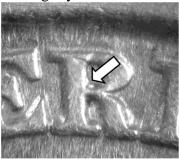


- Two deep diagonal (NW to SE) gouges in Liberty's gown almost in line beneath the left underarm and in Liberty's lap to the right of the pole (photo)
- LDS: weak dentils and foot support

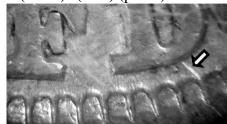
Reverse E Type 1 Reverse Hub



• Large S mintmark high in the field above the (HAL)F and slightly tilted to the left (photo)



• Unfinished die inside the lower left of the upper loop of (AME)R(ICA) (photo)



- EDS: die line from the D(OL) to the dentil below (photo)
- Die clash in the lower right shield

Coins with a late die state of this die marriage can be found with 140 reeds. Die state characteristics for this reed count are not distinguishable from earlier die states. Actual reed counting is necessary to verify the count.

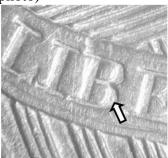
Date grid: M2, .030"	139 reeds; LDS-140 reeds		Typical diameter = 1.207"	Rarity - 2	
Drapery die state: Full	Foot support: Strong De		Dentils: EDS: Obverse - Full; Reverse - Full LDS: Obverse - Weak; Reverse - Weak		
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection		
Cross reference: WB-101.				Version 2.34	

## 1862-S WB-6, Large S, Repaired 6

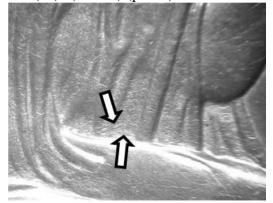
Obverse 5



• Centered date with repaired upper loop of the 6 (photo)



• Small lump in the outside lower loop of the (LI)B(ERTY) (photo)

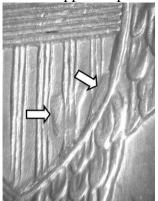


- Scattered die lines along Liberty's lap to the left of the pole (photo)
- Recut stars 2-8 and 10-13

Reverse A
Type 1 Reverse Hub



- Large S mintmark in the field above the right side of the (HAL)F (photo). This mintmark's position is low and to the right.
- Fine die line in the upper loop of the S (photo)



 Heavy die clashes in lower right shield (photo) and in the field below the right wing

This is the second use of this reverse die.

This is the second due of this fever die.						
Date grid: M2.5, .024"	140 reeds	Typical diameter = 1.206" Rarity - 5				
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Full; Reverse - Weak				
Grade of coin depicted: AU53		Coin from the Bill Bugert Colle	ection			
Cross reference: WB-101		Version 2.34				

#### 1863-S

All 1863-S half dollars have a perfect or broken top small S mintmark and were struck from dies made with the new Type 2 reverse hub. Three obverse dies and three reverse dies pair to produce four die marriages. The three reverse dies have mintmark position variations that facilitate quick identification.

With a mintage of 916,000 and three die pairs, simple arithmetic division says an average of 305,000 coins was struck per die pair. Various numismatic sources say that dies of this era will last that long. However, if you scrutinize coins of the same mint and approximately the same date, you will find that dies were not typically used that long. For example, varieties of the 1857-S half dollar, with a mintage of 158,000, has four obverse and three reverse dies, the 1855-S, with a mintage of 129,950, has four obverse and two reverse dies, and there are other similar examples. Die wear in the form of weak dentils and some die stress is known but die cracks are not for 1863-S half dollars. This leads me to believe that other 1863-S dies exist that have not yet been properly identified. After decades of searching, Randy Wiley and I have been unable to find another die marriage even though additional dies were available (see Table below). When and if a new die marriage is found, it will likely be rare.

The four die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	2
916,000	Shipped	-	12	5	(140, 141)
	Known	4	3	3	(140, 141)

1863-S Obverse and		Small Unbroken S	Small Partially Broken top S	Small Broken S EDS – weak top S LDS – broken top S
Reverse die identification ke	ys	A	B	SSS
Date centered	1	WB-1		
Date far left	2	WB-2	WB-3	
Date low	3		_	WB-4

#### 1863-S date grid quick reference table

Obverse date grid	Die Marriage
L3.5, .018"	WB-3
L3.5, .020"	WB-2
M1, .018"	WB-1
M1, .030"	WB-4

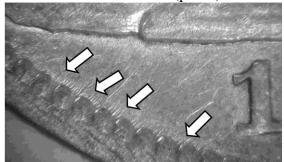
Some high grade 1863-S half dollars were contained in the Guatemala hoard and can be identified by their harsh baking soda-like cleaned surfaces. For more information, see the miscellaneous information section.

## 1863-S WB-1, Small Unbroken S

Obverse 1

1 8 6 8

• Date nearly centered between the dentils and the base of the rock (photo)



• Prominent die lines along the rim around the entire circumference (beneath the left edge of the rock support in this photo)

Reverse A

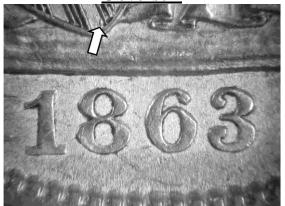


- Small S mintmark below the feather tip (photo). The upper loop of the mintmark is unbroken.
- Few faint scattered die lines within the feathers of the eagle
- Eagle heavily outlined

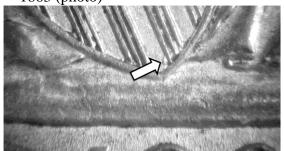
This is the first use of this reverse die.						
Date grid: M1, .018"	140 reeds only	eeds only Typical diameter = 1.204" Rarity - 3				
Drapery die state: Full	Foot support: Stron	rong Dentils: Obverse - Full; Reverse - Full LDS: both obverse and reverse dentils wea				
Grade of coin depicted: AU53			Coin from the Bill Bug	gert Collection		
Cross reference: WB-101.				Version 2.34		

## 1863-S WB-2, Small Unbroken S

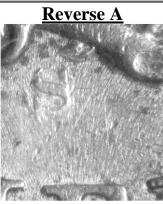
#### Obverse 2



Date far to the left, the only die so in 1863 (photo)



Lump inside the base of the shield next to vertical shield line D1 (above photos)



- Small S mintmark below the feather tip (photo). The upper loop of the mintmark is unbroken but very weak on this marriage.
- Excessive metal stress lines especially the area around the mintmark (photo above)

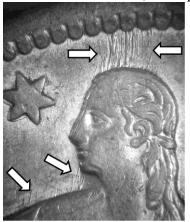
This is the first use of this obverse die and the second use of this reverse die.						
Date grid: L3.5, .020"	140 reeds and 141 reeds (LDS) Typical		Typical diameter: 1.210" Rarity - 3			
Drapery die state: Full	ll Foot support: Strong Denti			ls: Obverse - Full; Reverse - Weak		
Grade of coin depicted: AU53			Coin f	rom the Bill Bugert Collec	ction	
Cross reference: WB-101.					Version 2.34	

#### 1863-S WB-3, Small Partially Broken S

Obverse 2



- Date far to the left, the only die so in 1863 (photo)
- Lump inside the base of the shield next to vertical shield line D1 (above photo)

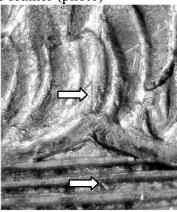


- Heavy vertical die lines above Liberty's head and from her shoulders (photo).
   LDS: these lines fade but are still visible.
- Light clash marks below the elbow and inside Liberty's right forearm.
- All starts recut
- LDS: weak foot support

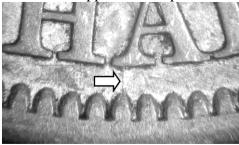




Small S mintmark with a <u>partially broken</u> upper loop with the right side vertically below the left tip of the feather (photo)



• Vertical die line in the recessed area above the tip of the shield (photo) and a die chip in the recessed area between the 2<sup>nd</sup> and 3<sup>rd</sup> horizontal lines below the upper shield tip



- File line from the left base of (H)A(LF) to the dentil (photo)
- Outlined upper half of the eagle

This is the second use of this obverse die.

Date grid: L3.5, .018" | 141 reeds only | Typical diameter: 1.210" | Rarity - 3

Drapery die state: Full | Foot support: Strong to weak | Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: AU50 | Coin from the Bill Bugert Collection

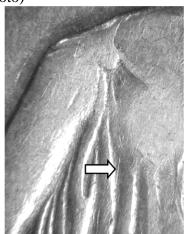
Cross reference: WB-102. | Version 2.34

#### 1863-S WB-4, Small Broken S

Obverse 3

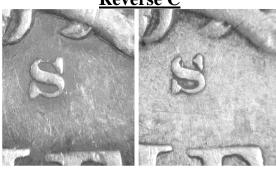


• Date in lowest position of any 1863-S (photo)



- Vertical line in the gown folds below Liberty's left breast (photo)
- MDS: light clash in Liberty's lap and thru right forearm

Reverse C



EDS (weak top S) LDS (broken top S)

• Small S mintmark low and to the left (photos of two die states above)



- EDS only: fine die line from a dentil above (AM)E(ERICA) (photo). This die line disappears with die wear and from the effects of die maintenance.
- All die states: eagle outlined
- LDS: weak Dentils and eagle tail feathers, and a fine die crack along the top of letters (UNI)TE(D)
- LDS: seen with a 5° CCW rotation

This marriage comes with two distinctive die states: partially and completely broken mintmark top. The broken top S is slightly scarcer than the partially broken S.

Date grid: M1, .030"	141 reeds only Typica			d diameter: 1.211" Rarity - 3		
,				Dentils:		
Drapery die state: LDS -	Weak	Foot support:	Full	EDS: Obverse - Full, Reverse - Full		
				LDS: Obverse - Weak, Reverse - Weak		
Grade of coin depicted: EDS – XF40, LDS – XF45				Coins from the Bill Bugert	Collection	
Cross reference: WB-102.					Version 2.34	

#### 1864-S

1864-S is a scarce date. With four distinct mintmark sizes and styles and two very scarce die marriages, this date is very interesting and challenging to collect. The obverse dies have date position variations or readily recognizable die diagnostics that permit quick identification.

Some high grade 1864-S half dollars were contained in the Guatemala hoard and can be identified by their harsh baking soda-like cleaned surfaces. For more information, see the miscellaneous information section.

Five die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	1
658,000	Shipped	-	11	5	(141)
	Known	5	4	4	(141)

1864-S Obverse and	Large S; tine on upper left serif of D(OL)	Small wide perfect S	Small wide broken S	Small thin S	
Reverse die identification keys		A	B	C	D
		Type 1 Hub			
Date far right	1	WB-1			
Date centered	2		WB-2		
Date high	3			WB-3	
Date left; die line in drapery	4			WB-4	WB-5

#### 1864-S date grid quick reference table

Obverse date grid	Die marriage
M1, .008"	WB-3
M1, .018"	WB-4
M1, .018"	WB-5
M3, .020"	WB-2
M4, .022"	WB-1

## 1864-S WB-1, Large S

Obverse 1



- Date far right (photo)
- LDS: weak die clash and partial drapery
- Recut stars 4, 7, 8, and 10-13
- Outermost start points on stars 5 and 7 have a tiny lump

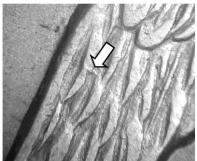
#### Reverse A

#### Type 1 Reverse Hub

• This is the only 1864-S reverse with this hub and the last appearance of any S-Mint die from this type 1 hub.



- Large S mintmark touching the olive stem and tilting slightly to the left (photo). The D(OL) has a tine protruding upwards from the upper left serif (photo). This tine is visible on coins grading as low as AG.
- LDS: mintmark sometimes weak



- Raised lump in the feathers on the eagle's left wing (photo)
- Clash mark in the lower right shield

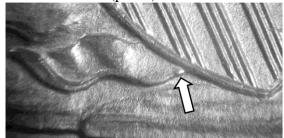
This large S mintmarked die marriage is by far the most easily found of all the 1864-S halves.					
Date grid: M4, .022"	141 weak reeds		Typical diameter = 1.212"	Rarity - 2	
Drapery die state: Full to partial (LDS)  Foot support: Str		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU50			Coin from the Bill Bugert co	Coin from the Bill Bugert collection	
Cross reference: WB-101.			Version 2.34		

## 1864-S WB-2, Small wide perfect S

Obverse 2



• Centered date (photo)

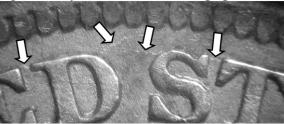


- Small lump on the lower edge of the ribbon along the lower left edge of the shield (photo)
- Unfinished under Liberty's chin
- Recut stars 7-13

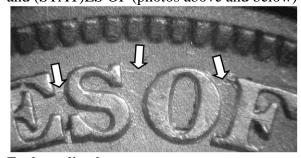
Reverse B Type 2 Reverse Hub



• Small wide perfect S mintmark with the right edge directly below the feather tip (photo)



• LDS only: die cracks on (UNIT)ED ST(ATES) and (STAT)ES OF (photos above and below)



• Eagle outlined

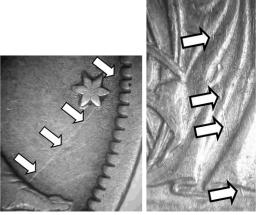
A very scarce die marriage especially in grades XF and higher.						
Date grid: M3, .020"	141 reeds		7	Typical diameter = 1.215"	Rarity - 4	
Drapery die state: Full Foot support: Strong				Dentils: Obverse - Full; Reverse - Full		
Grade of coins depicted: Bugert XF45, AU55 and				Coins from the Bill Bugert Collection and		
Wiley MS65				the Randy Wiley Collection		
Cross reference: WB-102.					Version 2.34	

## 1864-S WB-3, Small wide broken S

Obverse 3



• Date very high and to the left (photo)

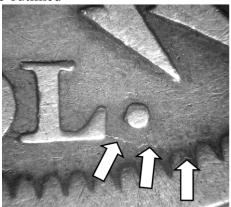


- Heavy vertical raised die line in Liberty's gown to the right of the shield's scroll (above right photo)
- LDS: die crack from Liberty's foot instep through star 13 to the dentils (above left photo)
- Recut stars 1-8 and 10-13

Reverse C
Type 2 Reverse Hub



- Small wide broken top S mintmark centered slightly to the left of the feather tip (photo)
- Eagle outlined



 MDS only: die crack from the lower right serif of the (DO)L, under the period, into the dentils (photo)

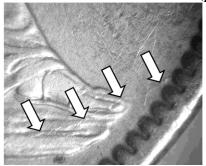
This is the first use of this reverse die.							
Date grid: M1, .008"	141 ı	eeds	Typical diameter = 1.217"	Rarity - 3			
Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: EDS: XF45, LDS: VF30			Coins from the Bill Bugert C	ollection			
Cross reference: WB-103.				Version 2.34			

## 1864-S WB-4, Small wide broken S

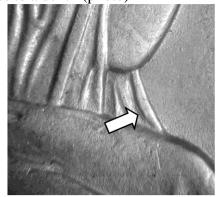
Obverse 4



• Date left and lower than on WB-3 (photo)

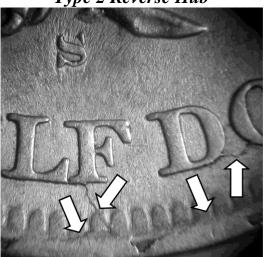


• Die crack from rock below foot thru the toes to a dentil (photo)

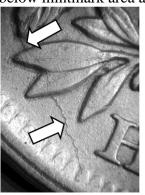


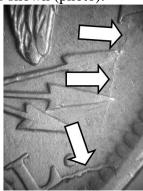
- Die line in the drapery below Liberty's elbow (photo)
- All stars recut

Reverse C
Type 2 Reverse Hub



• Small wide broken top S mintmark centered slightly to the left of the feather tip. Die cracks in denomination as shown; two heavy rim cuds below mintmark area as shown (photo).





- Die cracks: from dentils below H(ALF) through two middle olive leaves to left wing tip (above left photo) and (AMERIC)A through top two arrow heads into field (above right photo). The die crack from (DO)L below period to rim is more advanced in this die marriage.
- Eagle outlined
- Clash marks in lower right shield and in the field below both eagle's wings

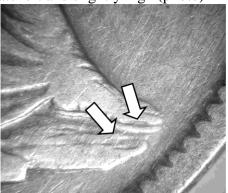
This is the first use of this obverse die and the second use of this reverse die.							
Date grid: M1, .018"	' 141 weak reeds			Typical diameter = 1.219"	Rarity - 3		
Drapery die state: Full	Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: AU55				Coin from the Bill Bugert Collection			
Cross reference: WB-103.					Version 2.34		

## 1864-S WB-5, Small thin S

Obverse 4



• Date left and slightly high (photo)



- Die crack from rock below foot through toes to a dentil (photo)
- The die line in the drapery below Liberty's elbow found on WB-4 is only faintly visible.
- Star recutting worn or polished away

Reverse D
Type 2 Reverse Hub



- Small thin S nearly centered in the field below the feather tip (photo)
- Eagle outlined
- This die is transitional with 1865-S.

This is the second use of this obverse die.							
Date grid: M1, .018"	141	weak reeds	Typical diameter = 1.215"	Rarity - 4			
Drapery die state: Full	rapery die state: Full Foot support: Strong		Dentils: Obverse - Weak; Reverse - Full				
Grade of coin depicted: VF30			Coin from the Bill Bugert Collection				
Cross reference: WB-104.				Version 2.34			

#### 1865-S

1865-S is fairly scarce especially in the high grades of XF or better, rare in Uncirculated. It is interesting and challenging to collect for the recut dates and two mintmark sizes; Small wide broken S on one die and Small thin S on seven dies. This year is the last use of the Small wide broken S mintmark in the Liberty Seated Half Dollar series. The small thin S dies are interesting for the variations in the mintmark placements (left, centered, right, tilted, upright) and differences in die cracks that allow them to be quickly distinguished. All 1865-S reverse dies were made from a Type 2 hub.

In later die states, five of the seven obverse dies are dramatically clashed with very similar appearances. Clash marks from the reverse die show plainly across Liberty's lap, under her elbow, and down her shin.

Nine die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	2
675,000	Shipped	-	12	0	(120, 140)
	Known	9	7	8	(139, 140)

1865-S date grid quick reference table

Obverse date grid	Die Marriage
L4.5, .029"	WB-4
L4.5, .029"	WB-2
M2, .021"	WB-9
M2, .025"	WB-1
M2, .028"	WB-5
M2, .028"	WB-6
M2.5, .024"	WB-8
M2.5, .029"	WB-7
M3.5, .026"	WB-3

Some high grade 1865-S half dollars were contained in the Guatemala hoard and can be identified by their harsh baking soda-like cleaned surfaces. For more information, see the miscellaneous information section.

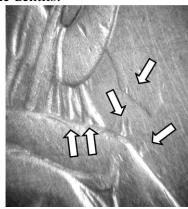
1865-S Obverse and Reverse die identification keys		Small wide broken S	Extensively cracked die	Cracked die	Mintmark low in field	rine on lower arrowhead	Mintmark centered in field	Mintmark centered in field	Mintmark right of center
		A	B	C	D	E	F	G	H
				75-15				12 C	
Centered									
date; heavily	1	WB-1							
clashed die									
Date far left;									
recut 1 and 5	2		WB-2		WB-4				
Date far									
right and	3			WB-3					
slants down	3			WD-3					
to right									
Date far left;	4				WB-5	WB-6			
clashed die	_				VV <b>D</b> -3	VV D-0			
Low date	5						WB-7		
Centered									
date and	6							WB-8	
clashed die									
Recut 1	7								<b>WB-9</b>

## 1865-S WB-1, Small wide broken S

Obverse 1



Centered date (photo). Note the die wear on the dentils.



- Heavily clashed die with clash lines in Liberty's lap, under Liberty's elbow, and along her right shin (photo) that fade with advancing die state
- EDS: Liberty's surfaces slightly rusty; no clashes or die cracks
- LDS: die cracked from dentil below date. thru rock support to star 1, thru stars 3-6, and from cap along stars 9-13 to Liberty's foot
- Recut stars 1-4 and 8-13



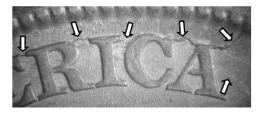


Small wide broken S mintmark: the only die in 1865 with this size mintmark and the last use of this mintmark size in the Liberty Seated Half Dollar series (photo). Mintmark unknown unbroken.



LDS: extensively cracked die almost around the entire circumference. Prominent cracks are depicted in the photographs.

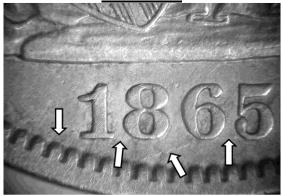




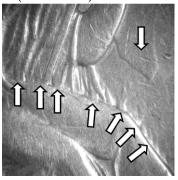
Date grid: M2, .025"	140 weak reeds	Typical diameter = 1.208" but known as large as 1.216"		Rarity: EDS - 4 LDS - 6	
Drapery die state: Full	Foot support: Strong		Dentils: Obverse - Weak; Reverse - Full		
Grade of coin depicted: EDS - AU53			EDS: Coin from the Bill Bugert Collection		
LDS - MS62			LDS: Coin from the Randy Wiley Collection		
Cross reference: WB-101.			Version 2.34		

## 1865-S WB-2, Small thin S, recut 1 and 5

**Obverse 2** 



• Date far left with a die crack from the 6 to the dentils below 8 and along the base of 65 (photo); slightly recut digits 1 and 5 (not shown)





- Heavily clashed die with clash lines in Liberty's lap and under Liberty's elbow (above left photo)
- Extensively cracked die nearly around the entire circumference but notably from the left base of the 1(865) thru the rock support to the rock; another thru stars 1-5; rim to star 8 to cap to star 9; and along stars 10-12 (above right photo)
- Recut stars 1-13

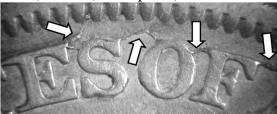
Reverse B



• Small thin S mintmark slightly right of center below the tip of the feather (photo)



 Extensively cracked die around the entire circumference but notably around the leaves area (above photo) and along the tops of letters (STAT)ES OF (below photo)

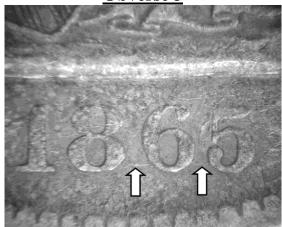


• Note: these cracks are very similar to WB-7; check the difference in mintmark placement.

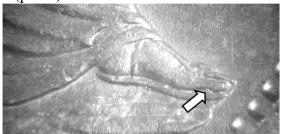
This is the first use of this obverse die. This die marriage has not been seen uncracked or unclashed.									
Date grid: L4.5, .029"	140 reeds		Typical diameter = 1.204"	Rarity - 3					
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full							
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection						
Cross reference: WB-102.			Version 2.34						

## 1865-S WB-3, Small thin S

#### Obverse 3



• Date far right and slants downward to right (photo)

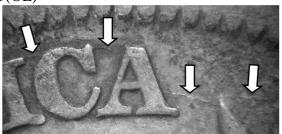


- All die states: twin die lines thru Liberty's big toe (photo)
- MDS/LDS: die crack along the base of the 865 (above photo)
- LDS: die crack thru ribbon
- VLDS: small cud on the die crack below the ribbon
- Stars 10-13 recut

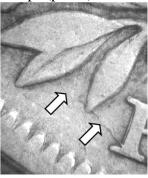




 Small thin S mintmark centered below the feather tip (photo) with die cracks from the lower right serif of (HAL)F to the dentil and to the D(OL)



• Die crack along the top of letters (AMER)ICA to arrow head tips (photo)



- Die crack from the lower left serif of H(ALF) to the olive leaves (photo). Note: this die crack is similar to that found on WB-4 and WB-5; check differences in mintmark placement.
- This die is transitional with 1864-S.

Date grid: M3.5, .026"	EDS (no die cracks): 140 reeds LDS: 139 reeds Both with lines between reeds			Typical diameter= 1.210"	Rarity - 3
Drapery die state: Full Foot support: Strong De			entils: Obverse - Full; Reverse - Weak		
Grade of coin depicted: XF45				Coin from the Bill Bugert Collection	
Cross reference: WB-102.				Version 2.34	

# 1865-S WB-4, Small thin S, recut 1 and 5

Obverse 2



Date far left with a die crack from the 6 to the dentils below 8 and along the base of 65 (photo); EDS: recut digits 1 and 5 (not shown)



- Heavily clashed die with clash lines in Liberty's lap and under Liberty's elbow (photo)
- Cracked die notably from the left base of the 1(865) thru the rock support to the rock
- Recut stars 1-13





- Small thin S mintmark low in the field and below the left edge of the feather tip (photo)
- Uncracked and unclashed die

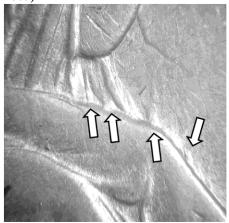
• Recut stars 1 13						
This is the second use of this obverse die and the first use of this reverse die.						
Date grid: L4.5, .029" 140 reeds			Typical diameter = 1.209"	Rarity - 4		
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: VF20			Coin from the Bill Bugert Co	ollection		
Cross reference: WB-102.				Version 2.34		

# 1865-S WB-5, Small thin S

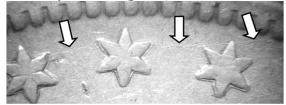
Obverse 4



• Centered date slants upward to right (photo)



 Heavily clashed die with clash lines under Liberty's elbow (photo)



- Die crack along tip of stars 11-13 to the dentils to the right of star 13 (photo)
- Recut stars 3, 4, 5, and 10-13





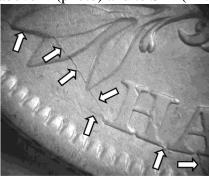
• Small thin S mintmark low in the field and below the left edge of the feather tip (photo)



• Die crack along the top of UNIT(ED) to the dentil above N (photo)



Die crack along the top of (UNI)TED to the dentil above D (photo) and to STA(TES)



• Die cracks from rim along the olive leaves to the bottom of HAL(F) to rim below A (photo)

This is the second use of this reverse die and the first use of this obverse die.

EDS (no die cracks): 139 reeds

Linto crid: N/L/ 11/Y''		(no die cracks): 139 reeds 140 reeds	Typical diameter = 1.208" Rarity - 2
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full
Grade of coin depicted: AU53			Coin from the Bill Bugert Collection
Cross reference: WB-102.			Version 2.34

# 1865-S WB-6, Small thin S

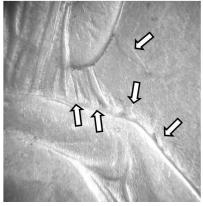
Obverse 4



• Centered date slants upward to right (photo)



• Die crack from dentils above Liberty's head thru star 8 to the tip of the cap (photo), another thru stars 11-13 to dentil

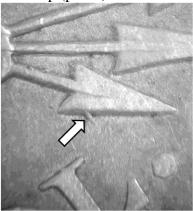


- Heavily clashed die with clash lines under Liberty's elbow (photo)
- Recut stars 4, 5, and 10-13

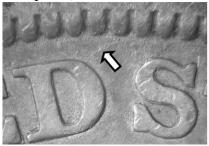
Reverse E



• Small thin S centered in the field below the curve of the feather tip (photo)



 Pointed tine from the lower edge of the lower arrowhead (photo)



- Die crack from upper right of the (UNITE)D to the dentils above the left side of S(TATES) (photo)
- LDS: die crack from the lower right serif of the H(ALF) to the rim and up thru the olive leaves to the wing tip

This is the second use of this obverse die.

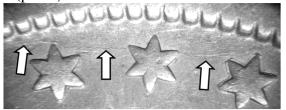
Date grid: M2, .028"	140 reeds	Typical diameter = 1.207"	Rarity - 4	
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Weak; Reverse - Full		
Grade of coin depicted: 2	XF40	Coin from the Bill Bugert Co	ollection	
Cross reference: WB-102	···		Version 2.34	

# 1865-S WB-7, Small thin S, Recut 1

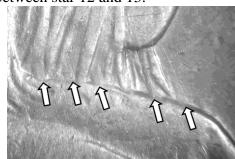
#### **Obverse 5**



• Low date with the 1 recut north and a fine die crack along the base of the digits (photo)



• Die crack along the outer tips of stars 5-7 (photo) and additional cracks from a dentil to the left of the date diagonally thru the rock support, from the top of Liberty's head along the out tips of star 8 to the dentil, and thru stars 10-12 to the dentil between star 12 and 13.

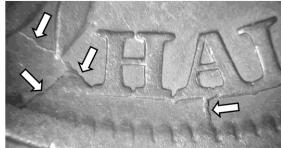


- Heavily clashed die with clash lines in Liberty's lap and under Liberty's elbow (photo)
- Recut stars 3-8 and 10-12

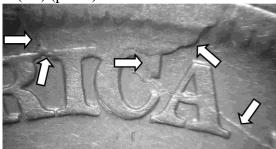
**Reverse F** 



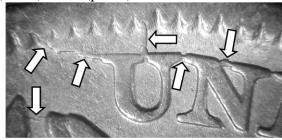
• Small thin S mintmark centered in the field below the feather tip (photo)



 LDS: heavily cracked die with a cud below HA(LF) (photo)



LDS: heavily cracked die with a cud above (AME)RICA (photo)



• LDS: heavily cracked die with a cud above U(NITED) (photo)

Date grid: M2.5, .029" 1	40 reeds	Typical diameter = 1.204"	Rarity - 2
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF-	15	Coin from the Bill Bugert Co	ollection
Cross reference: WB-103.			Version 2.34

#### Reverse die states of the 1865-S WB-7 die marriage

The 1865-S WB-7 die marriage is the best example of die state progression of all the Liberty Seated Half Dollar dates. If collecting different die states of the same die marriage interests you, this is the variety for you.

In the table below I've depicted four distinct die states of the reverse die of this variety with "a" being the earliest to "d" which is the latest. Although this reverse die is extensively cracked more so than the photographs, I've selected four different die cracked areas as a reference point to show the die deterioration. There are also intermediate die states as the die progressed in die state but it is obvious that this die was heavily used and is the most common of the 1865-S half dollars. Estimated rarities by die state are also included below. As most of these die states have varying availability, collecting all of these die states will be challenge. Lastly, I have not seen this die marriage without die cracks.

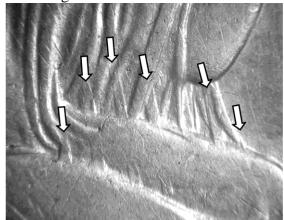
Reverse Die	Reverse Die	Reverse Die	Reverse Die
State "a"	State "b"	State "c"	State "d"
Rarity-4	Rarity-3	Rarity-3	Rarity-5
UNI(TED) cracks	UNI(TED) cracks	UNI(TED) cracks	UNI(TED) cud
	MANAMAN		
(STAT)ES cracks	(STAT)ES cracks	(STAT)ES cracks	(STAT)ES cracks
RICA AME(RICA) cracks	AME(RICA) cracks	AME(RICA) cracks	(AME)RICA cud
HA(LF) cracks	HA(LF) cracks	HA(LF) cracks	HA(LF) cud

# 1865-S WB-8, Small thin S

Obverse 6



Centered date slants down to right (photo). High grade EDS coins may show light recutting above the serif of the 1.



- Heavily clashed die with clash lines across Liberty's lap and under elbow (photo)
- LDS: long heavy file lines from the dentils above the foot to star 13
- Recut stars 9-11and 13
- Unfinished under Liberty's chin





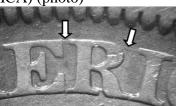
Small thin S mintmark centered in the field below the crotch (photo)



Die cracks on the tops of letters STATE(S) (photo) and diagonally into dentils above OF



Die cracks on the tops of letters OF A(MERICA) (photo)



Die cracks on the tops of letters (AM)ERI(CA) (photo)

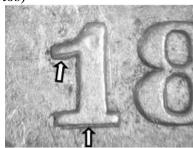
Date grid: M2.5, .024"		reeds with double lines een the reeds	Typical diameter = 1.209"	Rarity - 4
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF40			Coin from the Bill Bugert Co	llection
Cross reference: WB-102.				Version 2.34

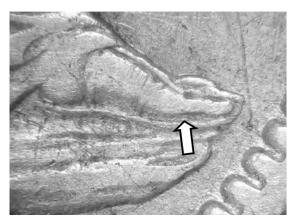
# 1865-S WB-9, Small thin S, Recut 1

Obverse 7

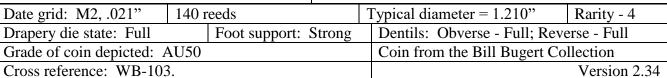


 Centered date and high with 1 recut north (photos)



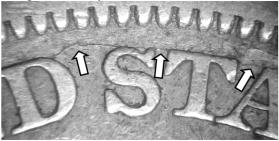


- Wavy die line in Liberty's sandal (photo)
- Recut stars 3-7 and 10-13





• Small thin S mintmark low and slightly right of center below the crotch (photo). The right side of the S is in line with the right side of the (HAL)F. This mintmark placement is further to the right than any other small thin S.



- Die crack above the (UNITE)D STA(TES) (photo)
- This die is transitional with the 1866-S No-Motto half dollar.

### 1866-S

1866-S is the last year of the No-Motto reverse design. It includes such interesting varieties as two variations of the digits in the dentils below the date and a doubled reverse die. 1866-S is generally a common date but scarcer in higher grades and a few die marriages are rare.

Ten die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
No Motto - 60 000	Requested	-	Unknown	Unknown	2
No-Motto = 60,000 With-Motto = 994,000	Shipped	-	12	12	(138, 139, 140)
	Known	10	6	6	(136, 139, 140)

1866-S Obverse and Reverse die		Doverse and Reverse die		Doubled die	Mintmark tilted to the right	Mintmark tilted to the right	Mintmark under feather tip
identification		No-Motto			With-Motte	0	
keys		Small thin S		•	Very Small	S	
		A	B	C	D V	E	F
Diagonal lines outside Liberty's drapery	1	WB-1		WB-3			
Centered date	2		WB-2				
Errant digit in the dentils below 86	3			WB-4	WB-5		
Date high and far left slanting down to right	4				WB-6		
Date far right	5				WB-7	WB-8	
Date right with an errant 86 in the dentils below the date	6					WB-9	WB-10

1866-S Date-grid summary reference table

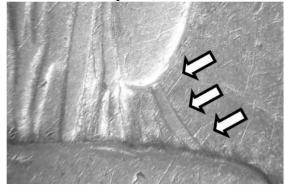
Obverse date grid	Die Marriage
L5.5, .019"	WB-4
L5.5, .019"	WB-5
L5.5, .019"	WB-6
M2, .020"	WB-1
M2, .020"	WB-2
M2, .022"	WB-3
M3, .022"	WB-9
M3.5, .020"	WB-7
M3.5, .022"	WB-10
M4, .021"	WB-8

## 1866-S WB-1, No-Motto, Small thin S

Obverse 1



• Centered date (photo)

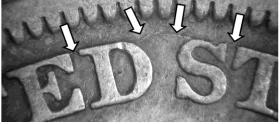


- Diagonal (NE to SW) parallel die lines from the drapery below Liberty's elbow into the right field (photo)
- Recut stars 1-7 and 10-13

Reverse A



• Small thin S mintmark low, tilted left, and slightly right of center below the crotch (photo)



Die crack above the (U)NITED STA(TES)
 (photo). Since this die cracked in 1865, all 1866 S half dollars with this reverse will be cracked.





- EDS: no clash in shield (rare in this die state) (above left photo)
- LDS: clash in shield (above right photo)
- This die is transitional with 1865-S.

A very scarce variety with a mintage of 60,000. This				he first use of this obve	rse die.
Data arid: M2 020"	140 **	140 reeds		diameter = 1.210"	Rarity: EDS - 5
Date grid: M2, .020" 140 re		eds Typical d		LDS - 4	
Drapery die state: Full Foot support:		Strong	Dentils: Obverse - Full; Reverse - Full		
Grade of coins depicted: EDS - XF45, LDS – XF40			Coins from the Bill B	ugert Collection	
Cross reference: WB-101.				Version 2.34	

## 1866-S WB-2, With-Motto

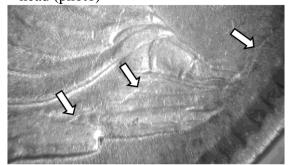
Obverse 2



• Centered date (photo)



 Heavily cracked die almost around entire circumference. Diagonally thru Liberty's head (photo)

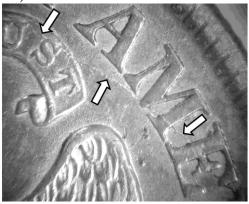


• Diagonal die crack thru rock support and foot (photo)





 Very small S mintmark high under the feather tip (photo)



- LDS: heavily cracked die almost around entire circumference, thru (TR)UST of the motto, and (A)MER(ICA) (photo). Other extensive cracks thru the denomination and legend.
- LDS: weak tail feathers below shield
- EDS: no clash or cracks. Small lump in the field near the scroll edge below the (T)R(UST)

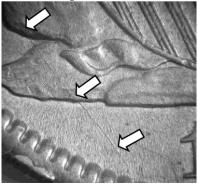
Date grid: M2, .020"	EDS: 140 reeds LDS: 139 and very weak reeds		Typical diameter = 1.207"	Rarity - 3
Drapery die state: Full Partial	Drapery die state: Full to Partial Foot support: Strong		Dentils: Obverse - Full to weak; Reverse - Full to weak	
Grade of coin depicted: AU50			Coin from the Bill Bugert Collection	
Cross reference: WB-102.				Version 2.34

## 1866-S WB-3, With-Motto, Doubled Die Reverse

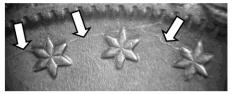
Obverse 1



• Centered date( photo)



 Extensively cracked die from dentils to left of date (above photo) thru rock support, stars 1-6 to rim and cap thru stars 9-13 (stars 11-13 in photo below) to Liberty's foot

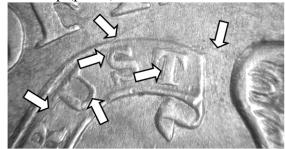


- Clash die below Liberty's elbow
- Diagonal die lines from the drapery below Liberty's elbow found on die WB-1 may not be visible here in LDS.

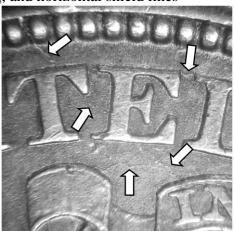




• Very small S mintmark centered below the feather tip (photo)



 Doubled die most with doubling most prominent on the TRUST (photo), the eagle's upper right wing, and horizontal shield lines



• Extensive die cracks around entire circumference and into motto (both photos)

This is the second use of this obverse die and the first use of this reverse die.

Doubling from the double die may not be visible on coins grading below F15; check for die cracks.

Date grid: M2, .022" 139 reeds		reeds	]	Typical diameter = 1.209"	Rarity - 3
Drapery die state: Full Foo		Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU55				Coin from the Bill Bugert Co	llection
Cross reference: WB-104.					Version 2.34

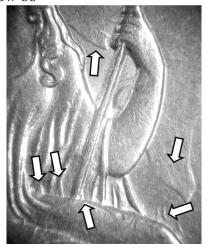
#### 1866-S

## WB-4, With-Motto, Double Die Reverse, errant digit in dentils

Obverse 3



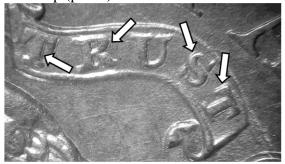
• Date far left, low, and slanting down to the right (photo). Errant digit in the dentils below 86



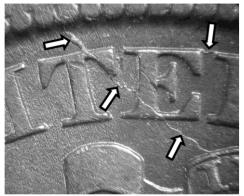
 Heavily clash marks in and around Liberty's lap, elbow, right arm and right hand (photo) Reverse C



• Very small S mintmark centered below the feather tip (photo). Note die stress lines in field.



 Double die with doubling most prominent on the TRUST (photo), the upper right eagle's wing, and horizontal shield lines



• Extensive die cracks around entire circumference and into motto; most prominent as above (both photos)

This is the first use of this obverse die and the second use of this reverse die.						
Date grid: L5.5, .019" 139 reeds Typical diameter = 1.212" Rarity - 4						
Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: MS60			Coin from the Randy Wiley	Collection		
Cross reference: WB-103, MPD-002.				Version 2.34		

## 1866-S WB-5, With-Motto, Errant digit in dentils

Obverse 3



• Date far left, low, and slanting down to the right (photo). Errant digit in the dentils below 86



 Heavily clash marks in and around Liberty's lap and elbow (photo) **Reverse D** 



Very small S mintmark below curve of the feather and tilted to the right (photo)



- Die line on top of (AMER)I(CA) as shown (photo)
- Clash inside lower right shield and below right wing
- Weak feathers below shield tip

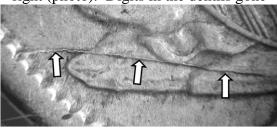
This is the second use of this obverse die and the first use of this reverse die.						
Date grid: L5.5, .019" 139 reeds			Typical diameter = 1.211"	Rarity - 4		
Drapery die state: Full Foot support: Strong Dentils: Obverse - Full; Reverse - Full			erse - Full			
Grade of coin depicted: MS60			Coin from the Randy Wiley	Collection		
Cross reference: WB-103, MPD-002.				Version 2.34		

## 1866-S WB-6, With-Motto

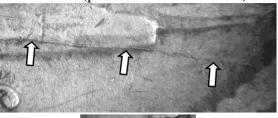
#### **Obverse 4**



Date high and far left slanting down to right (photo). Digits in the dentils gone

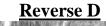


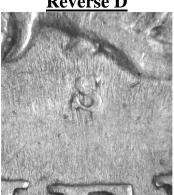
Bisecting die crack from rim left of rock support, thru rock support above date, to rim at K-5 (photos above and below)



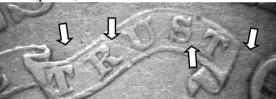


- Die crack from Liberty's instep to stars 13 and 12 (photo)
- Clash in draperv below Liberty's elbow





Very small S mintmark below curve of the feather and tilted to the right. Weak mintmark as above (photo)



- Cracked die from TRUST to right wing tip (photo)
- Clash inside lower right shield and below right
- Weak feathers below shield tip

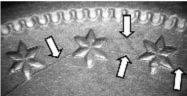
• Clash in drapery belo	W Liberty 3 cloow					
This is the second use of this reverse die.						
Date grid: L5.5, .019"	140 reeds	Typical diameter = 1.211" Rarit	y - 6			
Drapery die state: Full Foot support: Strong Dentils: Obverse - Weak; Reverse - Weak						
Grade of coin depicted: 2	KF45	Coin from the Randy Wiley Collect	ion			
Cross reference: WB-102	2.	Vers	sion 2.34			

## 1866-S WB-7, With-Motto

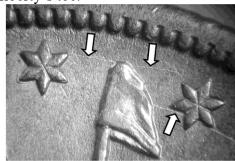
Obverse 5



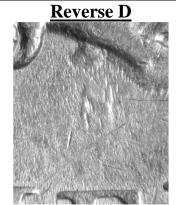
• Date far right (photo) with die crack to the upper left from the serif of the 1



• LDS: extensively cracked die; along base of digits of date, from top of 1 thru rock base to stars 1-5 (stars 1-3 above photo). Other cracks from top of head to star 8 to cap to stars 9 (below photo) to 13 to Liberty's toe.



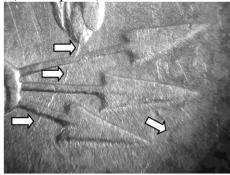
• Clash marks by Liberty's right hand



Very small S mintmark below feather and crotch.
 Very weak in LDS as above (photo)



LDS: extensively cracked die nearly around the entire circumference. From HALF thru olive leaf tips thru UNI(TED) to entire motto (above photo), (TRUST) to right wing tip around arrow heads (below photo) to DOL to dentils.



• Clash marks in lower right shield and below right wing

In LDS, the mintmark is very weak and may be misidentified as an 1866-P. This is the first use of this obverse die and the third use of this reverse die.

Date grid: M3.5, .020"	140 weak reeds	Typical diameter = 1.211"	Rarity - 3
Drapery die state: Partial Foot support: Strong		Dentils: Obverse - Full; Rever	se - Weak
C 1 $C$ 1 1 1 1	ATICO	C ' C 4 D'II D 4 C	11

Grade of coin depicted: AU58 Coin from the Bill Bugert Collection

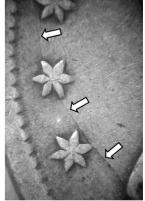
Cross reference: WB-102. Version 2.34

## 1866-S WB-8, With-Motto

Obverse 5



Date far right (photo)





- Die crack from rock support thru rock thru stars 1-3 (above left photo)
- Die crack along the circumference at K-5 thru Liberty's toes (above right photo)
- This die is heavily worn so much so that a coin will look like it has a split grade with the obverse at least 2 grades lower than the reverse.





- Very small S mintmark tilted to the right below the crotch (photo)
- Weak edges of the motto
- Weak tail feathers below the shield
- Clash marks in field above right claw

This is the second use of this obverse die and the first use of this reverse die.					
Date grid: M4, .021"	140 reeds Typical diameter = 1.210" Rarity - 3				
Drapery die state: Full	Foot support: Strong  Dentils: Obverse - Weak; Reverse - Weak but stronger than the obverse				
Grade of coin depicted: XF40			Coin from the Bill Bugert Collection		
Cross reference: WB-102.				Version 2.34	

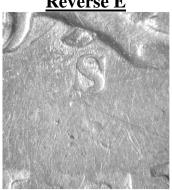
## 1866-S WB-9, With-Motto, Errant 86 in dentils

Obverse 6



- Date right with an errant 86 in the dentils below the date (photo)
- Recut stars 3, 4, 10, and 11
- EDS: no clash marks or die cracks
- LDS: weak die crack from rock support to second 6





- Very small S mintmark high under crotch and tilted to the right (photo).
- VLDS: note weak lower half of the mintmark and tops of the letters (HA)LF in the photo.



- Heavily clashed die with a die clash above the eagle's right claw (photo)
- Weak tail feathers from die wear and die polishing
- Weak upper edge of the scroll notably above (TR)UST

This is the first use of this obverse die and the second use of this reverse die.

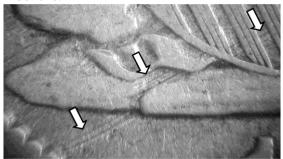
Date grid: M3, .022"	138 reeds	Typical diameter = 1.213"	Rarity - 4
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Weak; Reverse - Weak	
Grade of coin depicted: VF30		Coin from the Bill Bugert Colle	ction
Cross reference: WB-103, MPD-001			Version 2.34

## 1866-S WB-10, With-Motto

Obverse 6



 Date right with the errant 86 in the dentils found on WB-9 worn away and not visible on this die marriage (photo). Note weak dentils.



 Very heavy diagonal (SW to NE) and parallel die lines across the rock support, shield, and Liberty's skirt (photos above and below)

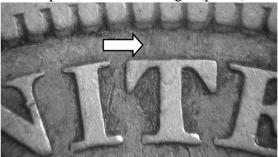


- Heavy clash lines in Liberty's lap, under the elbow, and down Liberty's right shin.
- Recutting on the stars very weak

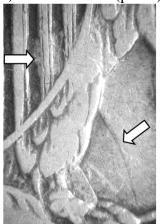




• Very small S mintmark high to the left under the feather tip and titled to the right (photo)



• Light die lines between the top of the (UNI)T(ED) and the dentils (photo)



- Heavily clashed die in the lower right shield and below the eagle's right wing (photo)
- Weak upper edge of the scroll notably above (TR)UST

This is the second use of this obverse die.						
Date grid: M3.5, .022"	138 reeds	Typical diameter = 1.212"	Rarity - 6			
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Weak; Rev	erse - Full			
Grade of coin depicted: \	VF30	Coin from the Bill Bugert Co	ollection			
Cross reference: WB-102	2.		Version 2.34			

### 1867-S

1867-S is a common date but it does have some redeeming desirability for the variety collector. There is a doubled reverse die, recut mintmark, digits in the dentils below the date, heavily clashed dies, cracked dies, and all reverse dies have a very small S mintmark with enough position variations to make them distinguishable. All die marriages seem to be available with some searching and none are especially rare.

Twelve die marriages are known as depicted in the following tables.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	2
1,196,000	Shipped	-	Unknown	Unknown	(138,139,140)
	Known	12	10	6	(130,139,140)

#### 1867-S Date-grid quick reference table

-5 Date-grad quick reference a				
Obverse date grid	Die Marriage			
M2.5, .026"	WB-3			
M4, .020"	WB-4			
M4, .022"	WB-7			
M4, .024"	WB-6			
M4.3, .024"	WB-5			
M4.5, .022"	WB-2			
M4.5, .026"	WB-10			
M4.5, .026"	WB-1			
M4.7, .024"	WB-9			
M5, .014"	WB-8			

1867-S Obverse and Reverse die identification key	ys	Heavy horizontal die line through the eagle's left wing into shield edge	Die line from dentil thru H(ALF)	Mintmark centered under crotch	Heavy diagonal die line from a dentil above (UNITE)D through upper loop of S (TATES)	Die line in upper right eagle's wing; die crack from serif of (AMERI)C (A) through A into field above the upper arrowhead	Doubled die on motto
		A	B	C	D	E	F
Centered date with small lump in rock above 8	1	WB-1					
Die crack from instep of foot	2		WB-2				
Die crack from Liberty's toe	3			WB-3			
Some small rust lumps by Liberty's left hand	4			WB-4			
Heavily clashed die	5				WB-5		
Slightly recut 186	6				WB-6		
Cracks thru starts 1-2 and from foot	7					WB-7	
High date and die lines inside Liberty's left elbow	8					WB-8	
Small line above the upper outer left edge of the shield	9						WB-9
Large raised lump on Liberty's right forearm near pole	10						WB-10

Obverse 1



• Centered date with small lump in rock above 8 (photo)

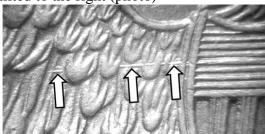


- LDS: very weak date; footless 1 (photo). Also note the very weak dentils.
- LDS: heavily polished dies details appear washed out and weak.
- MDS: wavy die crack horizontally thru the rock base and Liberty's foot. Another vertically from the tip of Liberty's left index finger.

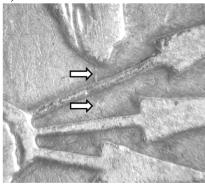
#### Reverse A



 Very small S mintmark below crotch and tilted to the right (photo)



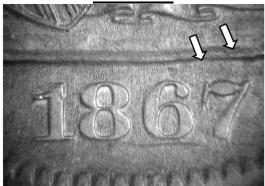
 All die states: heavy horizontal die line through the eagle's left wing into shield edge (photo)



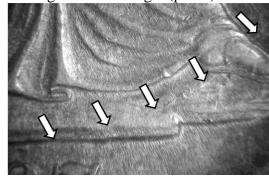
- LDS only: die crack from eagle's right wing tip thru arrow shafts (photo)
- LDS: heavily polished dies details appear washed out and weak notably on scroll edges, tail feathers, and dentils

LDS: This variety has heavily clashed and polished dies.					
Date grid: M4.5, .026" 138 reeds Ty		pical diameter = 1.1213" Rarity - 4			
Dranery die state: Hill		Dentils: EDS Obverse - Full; Reverse - Full LDS Obverse - Weak; Reverse - Weak			
	LDS - Weak		LDS Obverse - We	ak; Reverse - Weak	
Grade of coin depicted: EDS: AU53, LDS: F15		Coins from the Bill Bugert Collection			
Cross reference: WB-101.				Version 2.34	

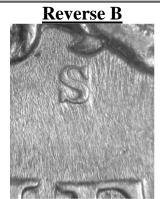
Obverse 2



• Date high and to the right (photo)



- Diagonal die crack from the top of the date across the rock support and out the foot instep (photo)
- Heavily clashed
- LDS: die stress lines in right field



Very small S mintmark below the feather tip (photo)



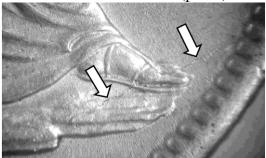
- Die line from dentils thru the lower left serif of the H(ALF) (photo)
- Weak tail feathers below the shield

Date grid: M4.5, .022"	139 shallow reeds T	Sypical diameter = 1.210" I	Rarity - 3	
Drapery die state: Full Foot support: Weak		k Dentils: Obverse - Weak;	Dentils: Obverse - Weak; Reverse - Full	
Grade of coin depicted: AU5	<b>18</b>	Coin from the Randy Wile	ey Collection	
Cross reference: WB-101.			Version 2.34	

Obverse 3



• Centered date and to the left (photo)



- Die crack from rock support thru foot into field to rim (photo)
- Recut stars 1-6 and 10-13

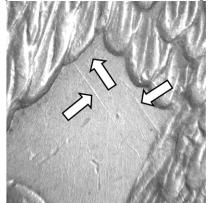




 Very small S mintmark high and under the crotch. EDS only: recut mintmark (photo).
 The recutting fades with advancing die state.



• Heavy die line above (STA)TE(S) (photo)



• Scattered die lines in the field below the eagle's left wing (photo)

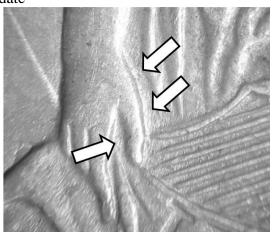
This is the first use of this reverse die.								
Date grid: M2.5, .026" 139 reeds		Typical diameter = 1.210"	Rarity - 3					
Drapery die state: Full	Foot support: W	eak Dentils: Obverse	- Full; Reverse - Full					
Grade of coin depicted: AU	J58	Coin from the Ran	ndy Wiley Collection					
Cross reference: WB-103.			Version 2.34					

## 1867-S WB-4, Recut S

Obverse 4

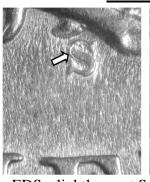


- Centered date (photo)
- Heavily clashed and polished die: clash lines under and around Liberty's elbow and right arm, by left hand, and below rock base above date



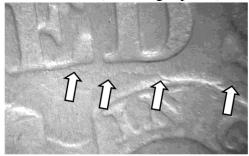
• Some small rust lumps by Liberty's left hand (photo)

**Reverse C** 





- EDS: slightly recut S mintmark centered and high under the crotch (above left photo)
- LDS: weak very small S mintmark centered under the crotch (above right photo)



- Die crack from base of (UNIT)E(D) to the scroll above (I)N (photo)
- Heavily polished die: weak tail feathers, upper right scroll edge, olive leaf tips, Legend, and Denomination
- Heavily clashed: clash marks (from the rock base) above scroll, beneath right wing, in lower right shield, and through olive leaves

This variety has very heavily polished dies. The detail will consequently appear weak and LDS coins will often grade at least 10 points higher than they appear.

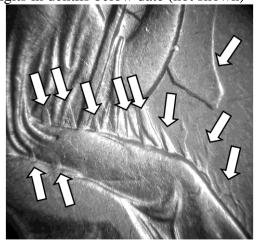
This is the second use of this reverse die.

Date grid: M4, .020"	139 reeds Typ		oical diameter = 1.208"	Rarity - 3
Drapery die state: Full	Foot support: Full		Dentils: Obverse - Weak;	Reverse - Weak
Grade of soins deniated: Al	1155	EDS Coin from the Randy	Wiley Collection	
Grade of coins depicted: AU55			LDS Coin from the Bill B	ugert Collection
Cross reference: WB-103.			Version 2.34	

Obverse 5



• Centered date (photo). EDS: two weak errant digits in dentils below date (not shown)



- LDS: Very heavily clashed (photo). Clash lines across Liberty's lap, around both arms, and along right leg.
- LDS: Diagonal die crack from Liberty's left shoulder across neck to star 8 and another diagonally (NW to SE) across rock and rock base
- Unfinished under Liberty's chin
- Recut stars 3-8 and 10-13

**Reverse D** 



• Very small S mintmark under the feather tip (photo)

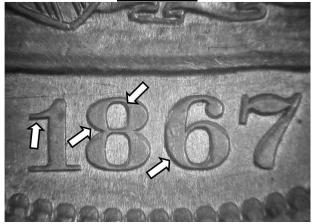


- EDS to MDS: Heavy diagonal die line from a dentil above the right side of (UNITE)D through upper loop of S(TATES) (photo). Not visible on LDS.
- Heavy clash in lower right shield, below right wing, and through olive leaves
- LDS: wavy horizontal die crack above and thru the motto and another die crack thru the upper olive leaf tip, left wing tip, and in the field below UN(ITED)

This is the first use of this reverse die.					
Date grid: M4.3, .024"	139 reeds	Typical diameter = 1.207"		EDS: Rarity - 4	
Date grid. W14.5, .024 159 feeds		Typical diameter = 1.207		LDS: Rarity - 3	
Drapery die state: Full	Foot support: Fu	ıll Do	Dentils: Obverse - Weak; Reverse - Weak		
Grade of coin depicted: AU	J50	Coin from the Bill Bugert Collection			
Cross reference: WB-101.			Version 2.34		

## 1867-S **WB-6, Recut 186**

Obverse 6



Centered date; EDS has a slightly recut 186 as above (photo). This recutting fades quickly with die state and lower coin grade.



Heavily cracked die. LDS: die crack from rim thru star 2 into left field (photo).

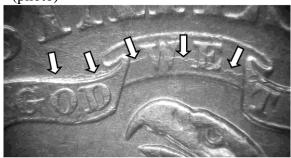


- EDS: Vertical die line below chin (photo)
- LDS: die crack horizontally thru Liberty's head below star 8 to the cap (photo). Other cracks thru stars 3-4 and diagonally (NW to SE) thru left edge of rock and rock base.

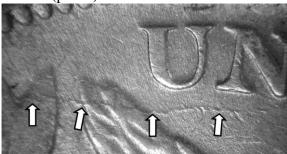
**Reverse D** 



Very small S mintmark below feather tip (photo)



Wavy horizontal die crack above and thru the motto (photo)



- Die crack thru the olive leaf tip, left wing tip, and in the field below UN(ITED) (photo)
- No evidence of the die line from a dentil above (UNITE)D through upper loop of S(TATES) as found when paired with WB-5

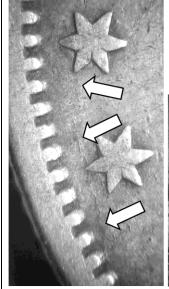
This it the second use of this reverse die.

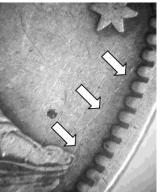
Date grid: M4, .024"	139 reeds	Typica	1 diameter = 1.212"	Rarity - 3
Drapery die state: Full	Foot support: I	Full	Dentils: Obverse - Full; Reverse - Weak	
Grade of coin depicted: AU50, AU53			Coins from the Randy	Wiley Collection
Cross reference: WB-101.				Version 2.34

Obverse 7



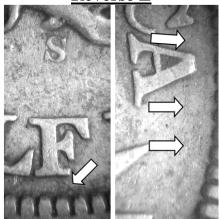
• Centered date (photo)



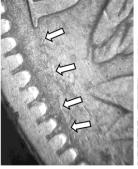


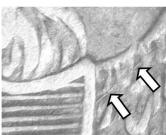
- Heavily cracked die from rim through stars 1-2 (above left photo) and from Liberty's foot to the second dentil below star 13 (above right photo)
- Clashed die most notably in the drapery below Liberty's elbow and in the field to left of Liberty's left hand
- EDS: no clash marks or die cracks

Reverse E



- Very small S mintmark tilted slightly to the right under curve of the feather tip (above left photo). Die crack diagonally from (HAL)F to dentil
- LDS: Die crack from serif of (AMERI)C(A) through A into field above the upper arrowhead (above right photo)





- LDS: Die crack from upper left serif of U(NITED) to the dentil to the left of the middle olive leaf (above left photo)
- EDS: Diagonal die line in the eagle's upper right wing near the shield. This die line fades with die state. (above right photo)
- Heavily clashed die most notably in the lower right shield and above right claw

|--|

Date grid: M4, .022"	e grid: M4, .022" 140 re		Typical	diameter = 1.204"	Rarity - 3
Drapery die state: Full		Foot support:	rt: Full Dentils: Obverse - Full		ll; Reverse - Full
Grade of coin depicted: XF45				Coin from the Bill Bug	gert Collection
Cross reference: WB-101.					Version 2.34

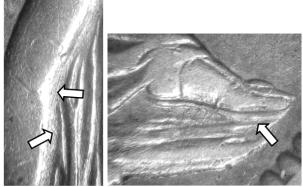
Obverse 8



• Date high and to the right with weakness on bottom of all digits as if the date was punched into the die at an angle (photo)



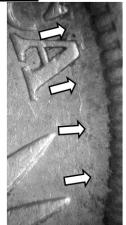
• EDS: 1 recut north (photo) (Wiley coin)



- Die lines to the right of the inside of Liberty's left elbow (left photo)
- EDS: Diagonal die line into rock base from Liberty's foot (right photo)
- All stars recut

Reverse E





- Very small S mintmark tilted slightly to the right under curve of the feather tip (above left photo). Die crack (HAL)F to dentil. LDS: mintmark weak.
- Die crack from serif of (AMERI)C(A) through A into field by lower arrowhead (above right photo)





- Die crack from upper left serif of U(NITED) to the dentil to the left of the middle olive leaf (left photo). A second die crack connects the rim through the dentils to this die crack.
- Die crack through TRUST (right photo)
- Weak eagle's feathers and left motto scroll
- Weak clash in lower right shield

This is the second use of this reverse. Here, the die cracks are more advanced and an additional die crack forms on the motto.

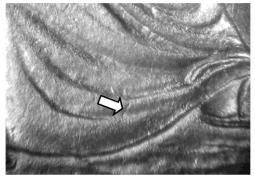
Date grid: M5, .014"	140 reeds		Typical diameter = 1.209"		Rarity - 3
Drapery die state: Full	l Foot support: Full		1	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU53				Coin from the Bill Buger	t collection
Cross reference: WB-101.					Version 2.34

## 1867-S WB-9, Doubled die reverse

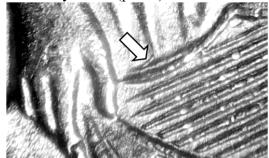
Obverse 9



• Centered date (photo). Die crack from upper loop of 8 to the 6 thru the rock support and foot to the dentils above the toes.



 Small lump in the gown to the left of Liberty's heel (photo)



- Small line above the upper outer left edge of the shield (photo)
- Faint vertical die line in the gown to the right of Liberty's left forearm
- Unfinished under Liberty's chin

**Reverse F** 

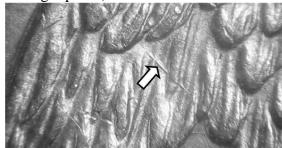


• Slightly recut very small S mintmark positioned slightly right under tip (photo)





- Doubled reverse die most prominently on motto and eagle's head (above left photo)
- Heavy nearly vertical die line thru scroll and I(N) (above right photo)



- Heavy diagonal (NW to SE) die line between feathers of the eagle's left wing (above right photo)
- Heavy diagonal (NW to SE) die line in the feathers below the shield tip
- Weak olive leaf tips

This is the first use of this reverse die.

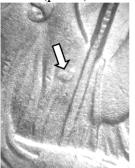
Date grid: M4.7, .024"	Unknown reeds		Typical	diameter = Unknown	Rarity - 4
Drapery die state: Full Foot suppor		Foot support:	Full	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: NGC MS61				Coin from the Dick Osbu	rn Collection
Cross reference: WB-102.					Version 2.34

## 1867-S WB-10, Doubled die reverse

Obverse 10



• Centered date (photo)

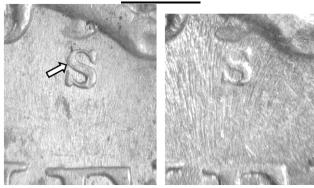


• Large raised lump on Liberty's right bicep near pole (photo)



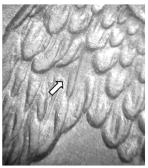
• LDS: extreme die stress lines in right obverse field (photo)

#### Reverse F

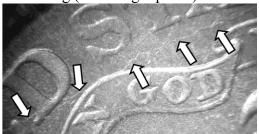


- EDS: Slightly recut very small S mintmark positioned slightly right under tip (above left photo)
- LDS: Weak very small S mintmark positioned slightly right under tip (above right photo). Die stress lines surround the mintmark.





- Doubled reverse die most prominently on motto and eagle's head (above left photo)
- Diagonal (NW to SE) die line between feathers of the eagle's left wing (above right photo)



- Wavy die crack between (UNIT)ED STA(TES) and top of motto above (I)N GOD (photo)
- Die crack along top of letters (AM)ERICA

This is the second use of this reverse die.					
Date grid: M4.5, .026"	140 reeds	Typical diameter = 1.202" Rarity - 3			
Drapery die state: Full Foot support: Full		Dentils: Obver	se - Weak; Reverse - Weak		
Grade of coin depicted: AU	J58	Coins from the	Bill Bugert Collection		
Cross reference: WB-102.			Version 2.34		

#### 1868-S

Although not usually considered an interesting date to study or collect, the 1868-S half dollar does have a few varieties that merit collectors' attention. There are three obverse dies with digits of a first date punched into the dentils below the prominent date. Secondly, a few dies are severely and dramatically cracked.

All 1868-S half dollars have a very small S mintmark in minor position variations. Most coins of this date are well struck although a few die states have weak tail feathers, olive leaves, and tops of letters. Each of the die marriages seem to have about equal rarity with WB-3 and WB-6 being the most common and marriages WB-1 and WB-5 the scarcest.

Eight die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	8	12	1
1,160,000	Shipped	-	8	12	(140)
	Known	8	7	6	(140)

1868-S Obverse an Reverse did identification	e	Lump in lower middle reverse shield lines	Die crack along upper arrow head to (AMERIC)	Wavy die crack from upper right eagle's wingtip through the motto to (STAT)E(S) to rim	Mintmark in crotch	Wavy die crack from upper right eagle's wingtip through the motto to (STATE)S; another along tops of (STAT)ES O(F)	Heavy horizontal die line in eagle's upper left wing
keys		A	B	C	D S	E	F
Top of 8 in dentils below the 68 in the date	1	WB-1					
Lump in crotch of Liberty's right arm and the staff	2	WB-2					
High date	3		WB-3				
Tops of 68 in dentils below 68 of date	4		WB-4	WB-5			
Die line in the crotch of Liberty's right arm and the staff	5				WB-6		
Top of 8 in dentils below the 8 in date	6					WB-7	
High date	7						WB-8

The date positions of 1868-S half dollars are similar enough that close scrutiny is required to distinguish them. The following table will assist in that endeavor.

1868-S date grid quick reference table

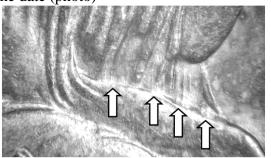
Date-grid	Die Marriage
M2.5, .023"	WB-7
M3, .018"	WB-3
M3.5, .016"	WB-8
M3.5, .021"	WB-1
M3.5, .021"	WB-2
M3.5, .021"	WB-4
M3.5, .022"	WB-5
M4.5, .027"	WB-6

## 1868-S WB-1, Errant 8 in dentils

#### Obverse 1



• Centered date with errant top of an 8 from the dentils below the left side of the second 8 in the date (photo)

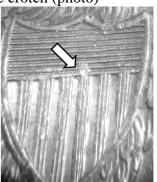


- LDS: clash marks in Liberty's lap and drapery (photo)
- EDS: not clashed

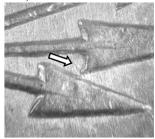




• Very small S mintmark offset slightly to the left of the crotch (photo)



 Large lump in the lower middle horizontal shield lines found on coins grading VG or better (photo)



• Small scattered die lines between the two lower arrowheads (photo)

This is the first use of this reverse die.								
Date grid: M3.5, .021"	140 reeds		Typical	diameter = 1.206"	Rarity - 4			
Drapery die state: Full Foot		Foot support:	Full	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: MS	S63		Coin from the Randy Wiley Collection					
Cross reference: WB-101.					Version 2.34			

Obverse 2



• Centered date (photo)

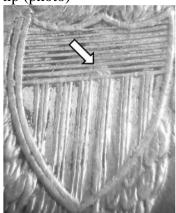


- Lump in the crotch formed by the Liberty's right biceps and the pole's staff (photo)
- Most stars are lightly recut.
- EDS: clashed die
- LDS: clash marks fade with die state





Very small S mintmark offset to slightly to the left of the crotch and nearly touching the feather tip (photo)



- Large lump in the lower middle horizontal shield lines can be found on coins grading VG or better (photo)
- LDS: tail feathers below the shield are weak and the die shows die stress lines. A weak clash mark in the lower right shield can be found on all coins of this date.

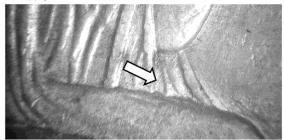
This is the second use of this reverse die.							
Date grid: M3.5, .021"	140 reeds		Typi	cal diameter = 1.203"	Rarity - 3		
Drapery die state: Full Foot su		Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF40				Coin from the Bill Bugert Collection			
Cross reference: WB-101.			Version 2.34				

## 1868-S WB-3, High date

Obverse 3



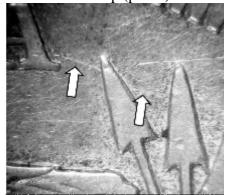
- Date slightly high in the field below the rock (photo)
- LDS: tiny die line from the dentils below the first 8



 Diagonal line in the drapery angles down from the tip of Liberty's elbow



Very small S mintmark centered below the curve of the feather tip (photo)



 Die crack from dentil above (AMER)I(CA) thru CA thru the top arrowhead to the field between the upper two arrowheads (photo)



• EDS to LDS: rust lump on the scroll to the lower right side of (TRUS)T

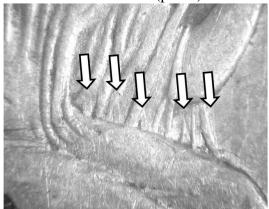
This is the first use of this reverse die.								
Date grid: M3, .018"	140 weak reeds		Typical diameter = 1.207"		Rarity - 2			
Drapery die state: Full Fe		Foot support:	Full	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: XF45				Coin from the Bill Bugert Collection				
Cross reference: WB-101.			Version 2.34					

# 1868-S WB-4, Errant 68 in dentils

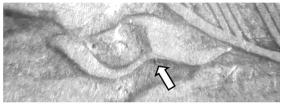
**Obverse 4** 



• Centered date with the tops of the digits 68 in dentils below 68 of date (photo)



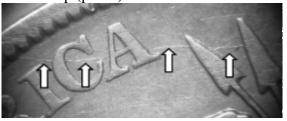
- MDS: clash lines across Liberty's lap and below her right elbow in the drapery (photo)
- EDS: no clash marks



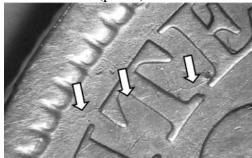
 Lump in the rock base on the lower edge of the ribbon (photo)



• Very small S mintmark centered below the feather tip (photo)



• LDS: extensively cracked. The first two cracks are found across the tops of OF to the rim and diagonally through (AMERI)CA to the arrow heads (photo)



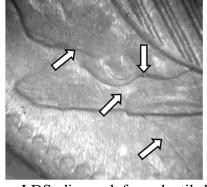
 Very LDS: a third crack diagonally from the rim through the letter (UNI)T(ED)

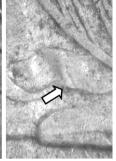
`1 /						
This is the first use of this obverse die and second use of this reverse die.						
Date grid: M3.5, .021"		eeds; weak and ow on some examples	Typical diameter = 1.2029"	Rarity - 3		
Drapery die state: Full to weak Foot support: Full			Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection			
Cross reference: WB-101.			Version 2.34			

#### Obverse 4



- Centered Date. MDS and LDS: weak lower digits of the date (photo)
- EDS: Uncracked
- Lump in the rock base on the lower edge of the ribbon (below photo, left and right)



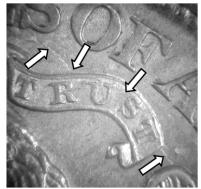


• LDS: die crack from dentils below left edge of 1 thru the rock base to star 1 to the dentils (above left photo). This die crack initially forms from left of the date upwards.

#### Reverse C



- Very small S mintmark low in the field below the tip of the arrow's feather (photo)
- EDS: uncracked



LDS: die cracks from the eagle's right wing tip thru the letters (T)RUST in the motto thru the lower left serif of the S(TATES) and lower right serif of (STAT)E(S) (photo)

This is the second use of this obverse die. When paired with WB-4, errant digits 86 are visible in the dentils below the date. Here, the dentils are worn and the errant digits are not visible. The heavy clash lines in Liberty's lap on WB-4 were mostly polished away and only faintly visible here. This die polishing accounts for the very weak drapery.

Date grid: M3.5, .022"	140 reeds	Typical diameter = 1.205" Rarity - 4		
Drapery die state: Weak	Foot support: Wea	Dentils: Obverse - Weak; Reverse - Full		
Grade of coin depicted: MS	563	Coin from the Randy Wiley Collection		
Cross reference: WB-101.		Version 2.34		

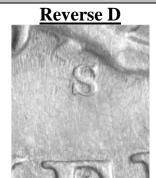
Obverse 5



• Date right when compared with the other obverse dies of 1868 (photo)



- Small die line in the crotch formed by Liberty's right arm and the staff (photo)
- LDS: die stress lines are visible radially around the outside of the die between the dentils and the tops of the letters



• Very small S mintmark centered below the crotch (photo)

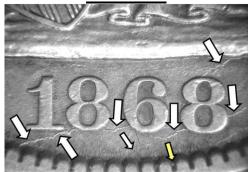


- Die crack connects the tops of (AM)ER(ICA) (photo)
- LDS: heavy clash lines in the shield's lower right and in the field below the eagle's right wing

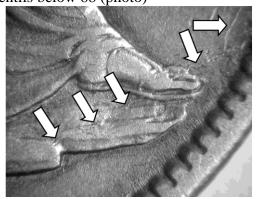
Date grid: M4.5, .027" 140 reeds Ty		Typical	l diameter = 1.207"	Rarity - 3	
Drapery die state: Full Foot suppo		Foot support:	Full	Dentils: Obverse - Ful	l; Reverse - Full
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection		
Cross reference: WB-101.					Version 2.34

### 1868-S WB-7, Errant 6 in dentils

Obverse 6



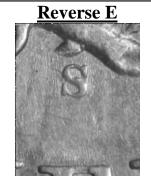
• Centered date with the top of a digit in the dentils below 68 (photo)



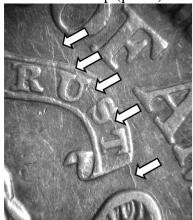
• LDS: extensively cracked around the date area into the rock and rim, in the field and star 1, and from Liberty's foot to the rim and through stars 11-13 (photos above and below)



• Recut stars 2-5



• Very small S mintmark is slightly right of the center of the feather tip (photo)



• LDS: extensively cracked from the upper right wing tip through the right end of the motto into the field below O(F) (photo)



LDS: diagonal die crack from the upper serif
of the (AMERI)C(A) to the (AMERIC)A
(photo). Other finer die cracks are along the
tops of the letters UNITE(D) and (STA)TES
O(F).

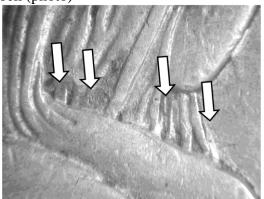
Date grid: M2.5, .023"	140 reeds		Typical diameter = 1.205"		Rarity - 4
Drapery die state: Full Foot support:		Full	Dentils: Obverse - Ful	ll; Reverse - Full	
Grade of coin depicted: XF45				Coin from the Bill Bug	gert Collection
Cross reference: WB-101, MPD-001.					Version 2.34

## 1868-S WB-8, High date

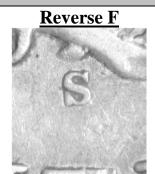
Obverse 7



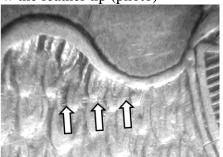
• Date high in the field below the base of the rock (photo)



- LDS: heavy clash lines across Liberty's lap and beneath Liberty's elbow in the drapery (photo)
- There are no other major diagnostics.



Very small S mintmark nearly centered below the feather tip (photo)



- Heavy horizontal die line in the feathers of the eagle's upper left wing (photo) Since it is a recessed area, this die line should be visible on EDS to LDS coins grading at least VG
- LDS: heavy clash lines in the shield's lower right and in the field below the eagle's right wing
- VLDS: die crack from the dentil above (STATE)S thru O(F) along the top of (TRU)ST in scroll to the top of the left wing

Date grid: M3.5, .016"	140 reeds		Typical	diameter = 1.205"	Rarity - 3
Drapery die state: Full Foot sup		Foot support:	Full	Dentils: Obverse - Ful	l; Reverse - Full
Grade of coin depicted: XF45				Coin from the Bill Bug	gert Collection
Cross reference: WB-101.					Version 2.34

### 1869-S

1869-S is an under-appreciated, better date in the Liberty Seated half dollar series. There are three die marriages all with very small S mintmarks in minor, but observable, placement variations.

This is one of the dates in the series with apparent very high die usage rates (1860-S is another). With a mintage of 656,000 and three die pairs, the average die use is approximately 215,000 coins – this is a very high mintage for coins with little die wear. Other die marriages may exist and, if they do, would be extremely rare.

The date placements on obverse dies 1 and 2 are very similar; obverse 3 is slightly more to the right than the other two.

The three known die marriages are summarized in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	2
656,000	Shipped	-	8	0	(120, 140)
	Known	3	3	3	(139, 140)

1869-S Obverse and Reverse die identification keys	Mintmark below feather tip	Parallel radial die lines between dentils and (HA)LF; mintmark below crotch	Mintmark below crotch; top of mintmark thin	
	S.		55	
		A	В	C
Parallel radial die lines between stars 11-12 and dentils	1	WB-1		
Errant digit in gown; lump in gown adjacent to Liberty's left forearm	2		WB-2	
Date slants down to the right; lump in gown adjacent to Liberty's left forearm	3			WB-3

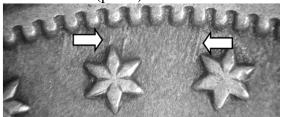
### 1869-S date grid quick reference table

Obverse date grid	Die Marriage
M2, .018"	WB-2
M2, .022"	WB-1
M3, .020"	WB-3

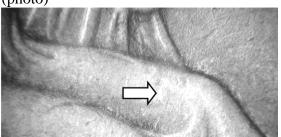
### Obverse 1



Centered date (photo)



Die lines between the dentils and stars 11-12 (photo)



Lump on top of the leg above the right knee (photo)





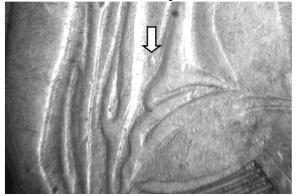
- Very small S mintmark centered below the feather tip and tilted to the right (photo)
- LDS: almost no to none tail feathers below shield and bottoms of C1-3 missing

1					
Date grid: M2, .022"	140 reeds Ty		Typical	diameter = 1.206	Rarity - 3
Drapery die state: Full to partial Foot support: Fu		Full	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection		
Cross reference: WB-101.					Version 2.34

### Obverse 2



• Centered date with what appears to be an errant digit in Liberty's gown above the 6 in the date; its' shape appears to be the upper left flag of the 1 or the upper left flag of a 5 and a horizontal die line above the ribbon at the lower left of the shield. (photo)

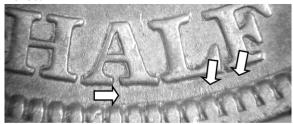


• Small lump in Liberty's gown adjacent to Liberty's left forearm similar to WB-3 (photo)

Reverse B



• Very small S mintmark located below the crotch



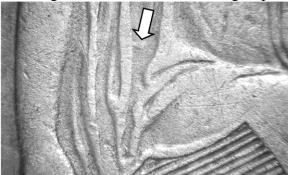
- Many fine parallel radial die lines beneath (H)ALF along the dentils; these die lines appear below (HA)LF even on late die state coins with weak tail feathers (and no drapery obverse).
- This die is lightly clashed and has telltale remnants around the olive leaves.

Date grid: M2, .018" 140 reeds		Турі	cal diameter = 1.201"	Rarity - 3	
Drapery die state: Full to No drapery Foot support: Stror		ong	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF45				Coin from the Bill Buger	t Collection
Cross reference: WB-101.					Version 2.34

Obverse 3



• Date right and slants down to the right (photo)



- Small lump in Liberty's gown adjacent to Liberty's left forearm similar to WB-2 (photo)
- Another lump on Liberty's right leg below the knee fades with lower coin grade.

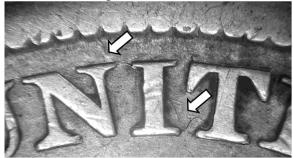
**Reverse C** 



• Very small S mintmark below and slightly left of the crotch (photo). LDS: mintmark is weak at the top.



• LDS: die crack along the top of letters (AME)RICA (photo)



- LDS: die crack from the rim to the upper left upright of the (U)N diagonally through I to the bases of TED
- Weak tail feathers below shield

In later die states with a reed count of 140 (as in the photographs), advanced die wear and stress lines are around the circumference adjacent to the dentils. Early die states with a reed count of 139 may not show these effects.

Date grid: M3, .020"	Reed count: EDS: 139 reed LDS: 140 reed		$\perp$ Lynical diameter = 1.703"		Rarity - 3
Drapery die state: Partial Foot support: Weak		Dentils: EDS: Obverse - Full; Reverse - Full LDS: Obverse - Weak; Reverse - Weak			
Grade of coin depicted: VF35				Coin from the Bill Bugert Collection	
Cross reference: WB-101.				Version 2.34	

### 1870-S

This is a scarce date that is often unappreciated and nice original coins are less available than you might think. Many seem to be cleaned or heavily dipped.

All 1870-S half dollars have a very small S mintmark. With a reported mintage of slightly over a million coins, the two obverse and three reverse dies found on 1870-S coinage were used heavily; however, in early die states, well struck coins can be located. In later die states, all marriages suffer from heavy use and show die strain mostly likely from the resultant die maintenance. The dies were abraded and the struck coins show lack of detail and weak features so much so that some coins actually appear to overly worn or poorly struck. Careful study of the later die state coins is necessary to ascertain an accurate grade.

Four die marriages are known as follows.

N	Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
		Requested	1	6	6	2
1.	,004,000	Shipped	-	6	6	(139, 140)
		Known	4	2	3	(139, 140)

1870-S Obverse and Reverse die identification ke		Mintmark low and to the left	Mintmark high in crotch; 3 lumps below upper arrow feather	Mintmark low and centered below crotch: EDS: die lines in eagle's mouth
		A	В	C
Date left; vertical line in upper right shield's horizontal lines LDS: very weak 18	upper right shield's horizontal lines			WB-3
Date right	2		WB-2	WB-4

### 1870-S date grid quick reference table

Obverse date grid	Die marriage
M1.5, .026"	WB-3
M2, .025"	WB-1
M3.5, .026"	WB-2
M3.5, .028"	WB-4

Mintmark: Reverse A	Mintmark: Reverse B	Mintmark: Reverse C
		Q L
7		700
Mintmark low and to	Mintmark high in crotch;	Mintmark low and
the left of crotch	(Left) EDS – Strong S	centered below crotch
	(Right) LDS – Top of S weak	

Distinguishing these die marriages is difficult but can be simplified with the assistance of a few hints. There are two obverse dies. Obverse 1 has a date placement to the left and, in later die states, has a weak date especially on the 18. Obverse 2 has a date placed to the right and a strong date. Both are paired with two reverse dies. Obverse 2 is paired with reverses (B and C) which are difficult to distinguish but have slightly different positions as depicted in the table above.

# 1870-S WB-1, Date left

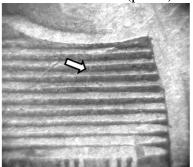
Obverse 1



• EDS: date left (photo)



• LDS: date left and weak 18 (photo)



- EDS: heavy vertical die line in the upper right horizontal obverse shield lines. Many die lines inside and around shield.
- LDS: most details weak with the date almost missing and the rock and drapery very weak

Reverse A

- Very small S mintmark below feather tip and low. (EDS: above left photo and LDS above right photo)
- EDS: small rim cud below the H(ALF)
- LDS: weak lower left scroll edges, weak upper wing feathers adjacent to the shield, weak tail feathers below shield, and weak olive leaf tips

This is the first use of this obverse die.

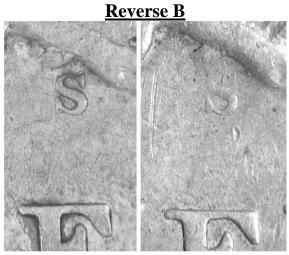
Date grid: M2, .025"	EDS: 140 reeds LDS: 139 reeds		Typica	ıl diameter = 1.205"	Rarity: EDS - 3 LDS - 4
Drapery die state: Weak to None   Foot support: Weak			Dentils: Obverse - Weak; Reverse - Weak		
Grade of coin depicted: EDS - VF30, LDS - XF45				Coins from the Bill Bug	ert Collection
Cross reference: WB-101.					Version 2.34

# 1870-S WB-2, Date right

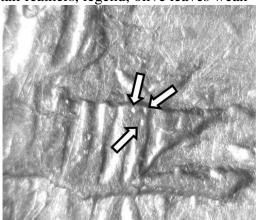
Obverse 2



- Date right (photo)
- LDS: dentils, rock, foot support, and drapery weak



- Very small S mintmark high in the crotch
- EDS: mintmark strong (above left photo)
- LDS: top of mintmark weak (above right photo), die crack above the letters (O)F AM(ERICA) and the tail feathers, legend, olive leaves weak



• Small (rust?) lumps all over the reverse (shown here in the recessed area of the tail feathers below the upper arrow feathers (photo))

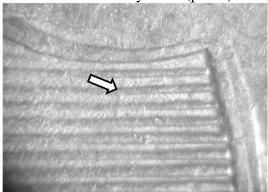
This is the first use of this obverse die.							
Date grid: M3.5, .026"	139 reeds	Ту	pical diameter = 1.209"	Rarity - 3			
Drapery die state: EDS: Full LDS: Partial and None	Foot support: EDS: Full LDS: Weak	Dentils: EDS: Obverse - Full; Reverse - Full LDS: Obverse and Reverse - Weak					
Grade of coin depicted: EDS	: XF45, LDS: XF45	Co	oins from the Bill Bugert Co	llection			
Cross reference: WB-101, 10	02. (incomplete mintma		Version 2.34				

# 1870-S WB-3, Date left and weak

### Obverse 1



Date left and extremely weak (photo)

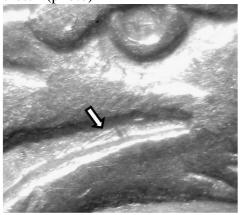


- Weak vertical die line in the upper right horizontal obverse shield lines (photo)
- In all die states of this die marriage, most obverse details are weak with the date almost missing and the rock and drapery very weak.





Very small S mintmark low and centered below the crotch (photo)



Die lines inside the eagle's mouth (photo)

This is the second use of this obverse die and first use of this reverse die.

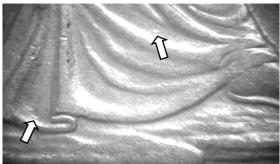
This is the second use of this obverse the that hist use of this reverse the.					
Date orid: MI 5 026"		weak reeds with lines een the reeds	Typical diameter = 1.209" Rarity -		
Drapery die state: Full Foot support:		Foot support: Full	Dentils: Obverse - Full; Reverse - Full LDS: Obverse dentils very weak		
Grade of coin depicted: AU55		Coin from the Bill Bugert Collection			
Cross reference: WB-101.				Version 2.34	

# 1870-S WB-4, Date right

Obverse 2



- Date right (photo)
- EDS: rim cuds below date

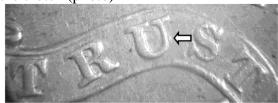


- Lump in gown folds above the right edge of the 7 in the date and another large lump in gown to upper left of Liberty's right ankle (photo)
- Weak dentils, rock, foot support, and drapery

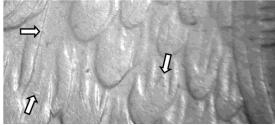
**Reverse C** 



• Very small S mintmark low and centered below the crotch (photo)



• Small lump on the lower right of the (TR)U(ST) in the motto (photo)



• Scattered die rust lumps on eagle's left wing (photo)

This is the second use of this obverse die and second use of this reverse die.

Some EDS examples of this die marriage exist with a 28° counter-clockwise rotated reverse.

Date grid: M3.5, .028" 139 reeds		eeds	Typical diameter = 1.210"	Rarity - 4
Drapery die state: Partial to None		Foot support: Full to	Dentils: Obverse - Full; Reverse - Full; bot	
		weak	weak in LDS	
Grade of coin depicted: AU50		Coin from the Bill Bugert Col	lection	
Cross reference: WB-101.				Version 2.34

### 1871-S

1871-S is a commonly available yet an interesting date to collect. With three distinct mintmark sizes and styles (see discussion below), a doubled obverse die, and multiple reed counts, any die marriage collector will be delighted and challenged with searching for all possibilities. Most examples of this date are well struck but advanced die abrasion is known. Well struck coins can be easily found on a few die marriages.

Nine die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	8	0	4
2,178,000	Shipped	-	Unknown	Unknown	(120 140 142 144)
	Known	9	8	6	(139, 140,143, 144)

With the introduction of a new style mintmark for 1871-S, it is worthwhile here to compare and discuss the mintmark characteristics. The small wide S mintmark (1863-1864) and very small thin top S mintmark (1866-1870) were previously used and are merely a reuse in 1871-S. This year is the first and only use of the very small thick top S mintmark. Note the thicker upper loop of the letter S and the much larger lower serif as compared to the very small thin top S mintmark. The style of the lower serif differs on each of the mintmarks. Recognizing these differences will enable quick identification of the three sizes and styles.

1871-S Mintmark Sizes and Styles								
	Small Wide S	Very small thin top S	Very small thick top S					
# Reverse dies	2	2	2					
Height	.044"	.034"	.036"					
Width	.036"	.030"	.030"					

Note: Measurements are typical and could vary by  $\pm .002$ " with coin grade and die wear.

1871-S Obverse and Reverse die identification keys		Very weak very small thin top ( <u>old</u> style) S Die crack between (A)ME(RI CA)	Very small thick top ( <u>new</u> style) S below crotch	Small wide S mintmark; GOD <sup>°</sup>	Very small thick top ( <u>new</u> style) S Die crack connects top of UN(ITED)	Very small thin top (old style) S Heavy diagonal (NW to SE) die lines in the eagle's upper left wing feathers	Small wide S mintmark Die line below upper arrow feathers
Reys		A	B	C S CTO T	D S	E	F S
Doubled obverse die and small lump at the bottom of the inside lower loop of the 8	1	WB-1					
Two lumps under Liberty's chin	2		WB-2				
Diagonal die line in the drapery below Liberty's elbow	3		WB-3				
Three raised lumps on Liberty's left breast and gown neck line	4			WB-4			
Tiny lumps along Liberty's left arm and in between thumb and index finger	5				WB-5		
Heavy clash lines across Liberty's lap	6					WB-6	
Rust lump in Liberty's skirt	7						WB-7
Die crack below the date and two die lines under Liberty's chin	8						WB-8

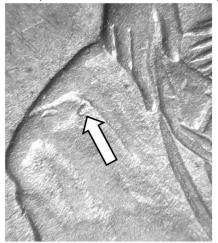
# 1871-S date grid quick reference table

Obverse date grid	Die Marriage
M2.5, .028"	WB-1
M3, .022"	WB-4
M3, .024"	WB-2
M3.5, .016"	WB-3
M4, .020"	WB-6
M4, .022"	WB-8
M4.5, .020"	WB-5
M4.5, .022"	WB-7

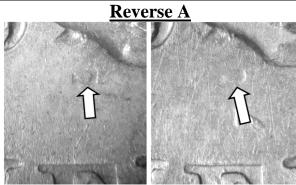
# 1871-S WB-1, Doubled Obverse Die, Incomplete S

Obverse 1

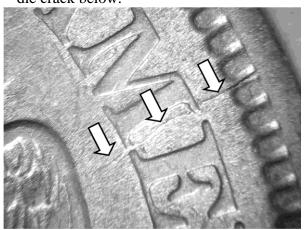
- Centered date. LDS with a small lump at the bottom of the inside lower loop of the 8 (photo)
- This obverse is a doubled die. The vertical shield lines are slightly doubled (in photo above date) as on the outside shield edge.



- Large lump on the rock to the left of Liberty's index finger (photo)
- Bold tine off dentil at star 13



Very weak top very small thin top (<u>old</u> style) S centered below the crotch (above left photo). VLDS, the mintmark is barely visible (above right photo). Beware this die marriage being sold as an 1871-P - check for die crack below.



- LDS: die crack from the rim between (A)ME(RICA) to the eagle's right wing (photo).
- LDS: very weak mintmark, no tail feathers, weak upper scroll above TRUST, and weak lower olive leaf tips. Light die stress lines are evident from K12 to K6.

I have not been able to relate the reed count to a coin's exact die state. Side by side comparisons or actual reed counting are the only reliable means of differentiating them.

	Date grid: M2.5, .028"	shallo	EDS: 139 weak, shallow reeds LDS: 144 reeds		l diameter = 1.207"	EDS: Rarity - 3 LDS: Rarity - 4
	Drapery die state: None, all I've seen have no drapery to weak (LDS			Dentils: Obverse - Full; Reverse - Full		
Ī	Grade of coins depicted: AU50				Coins from the Bill Bu	gert Collection
	Cross reference: WB-103.					Version 2.34

## 1871-S WB-2, Very small thick top S

#### Obverse 2



Centered date (photo)



- Two lumps under Liberty's chin (photo). These lumps are in a recessed area of the obverse and should be visible on low grade coins.
- All stars are heavily recut.
- Many fine diagonal (NE to SW) die lines in the rock directly under Liberty's sandal

**Reverse B** 



- Very small thick top (<u>new</u> style) S mintmark positioned high and centered below the crotch (photo).
- No other readily identifiable and usable die defects to use as a reference
- EDS: short diagonal line connects the shield's vertical stripes B3 and C1 near the bottom of the recessed area
- MDS/LDS: clash mark in lower right shield

This die marriage is the first use of this reverse die.

I have not been able to determine the reed counts by a coin's exact die state. Side by side comparisons or actual reed counting are the only reliable means of differentiating them.

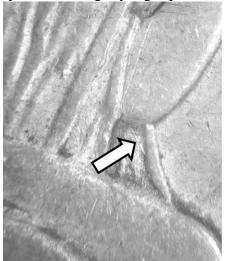
	EDS:	144 reeds	Typical	l diameter = 1.207"	
Date grid: M3, .024"	MDS	: 139 reeds	3 differ	ent collars with	Rarity - 3
_	LDS:	140 reeds	approxi	imate same diameter	-
Drapery die state: Full Foot support:		Full	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: EDS - AU55				Coin from the Bill Bugert Collection	
Cross reference: WB-102.				Version 2.34	

# 1871-S WB-3, Very small thick top S

Obverse 3



• Date positioned slightly high (photo)

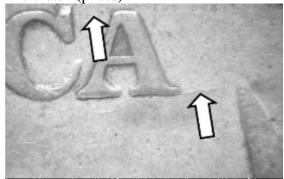


• Diagonal (NW to SE) die line in the drapery below Liberty's elbow (photo). This die line is weaker in later die states.





• Very small thick top (<u>new</u> style) S mintmark positioned high and centered below the crotch (photo)



- Die crack from the base of the letter (AMERIC)A towards the tip of the upper arrow head and between the tops of letters CA (photo).
- LDS: weak tail feathers and tip of the second olive leaf

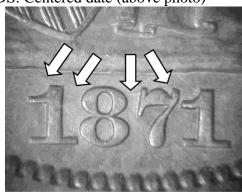
This die marriage is the second use of this reverse die.					
Date grid: M3.5, .016"	143 r	eeds	Typical	diameter = 1.205"	Rarity - 3
Drapery die state: Full		Foot support:	Full	Dentils: Obverse - Ful	ll; Reverse - Full
Grade of coin depicted: XF45				Coin from the Bill Bug	gert Collection
Cross reference: WB-101.				Version 2.34	

# 1871-S WB-4, Small wide S

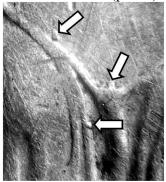
Obverse 4



• LDS: Centered date (above photo)



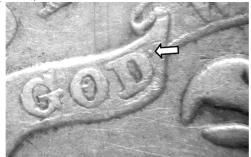
• EDS with 143 reeds: arching die clash from motto's scroll above date (photo)



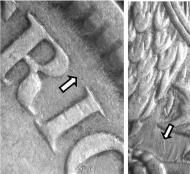
- Raised lumps (3) on Liberty's left breast and gown neck line (photo). These lumps can be found on coins grading at least F12.
- LDS: weak toe support and light clash lines in Liberty's drapery below her elbow



• **Small wide S** mintmark below the crotch (photo). LDS as above: weak mintmark



Lump within scroll to upper right of (GO)D (photo)



LDS: die crack connects tops of letters AMERICA (photo), missing tail feathers (photo), weak lower vertical shield lines (photo), weak scroll top above TRUST, weak lower left olive leaves, and weak eagle's upper right feathers

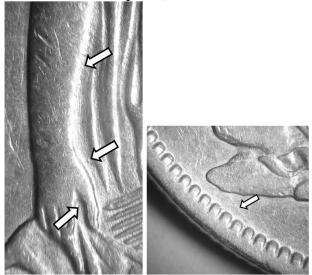
Date grid: M3, .022"	EDS-143, LDS-144 reeds	Typical diameter = 1.206"	Rarity - 2	
Drapery die state: Full	Foot support: Full - weak	Dentils: Obverse & Reverse - F	full to weak	
Grade of coin depicted:	XF45	EDS: Coin from the Randy Wiley Collection LDS: Coin from the Bill Bugert Collection		
Cross reference: WB-10	02.		Version 2.34	

# 1871-S WB-5, Very small thick top S

Obverse 5



• Centered date (photo)

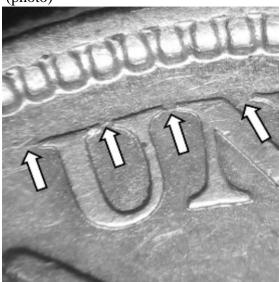


- Tiny lumps along Liberty's left arm and in between thumb and index finger (above left photo). These lumps fade with later die states.
- Diagonal die crack from rim to left base of rock (above right photo)
- Curved die line in the recessed area left of the pole base

• LDS: weak drapery from elbow



• Very small thick top (<u>new</u> style) S mintmark slightly left of the feather tip (photo)



- Die crack connects the tops of letters UN(ITED) (photo)
- LDS: weak tail feathers and weak F1-3 vertical shield lines

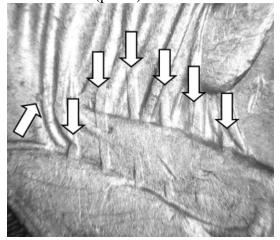
BBB: Weak drapery fro	111 0100	* *		
Date grid: M4.5, .020"	144 reeds with double lines between reeds		Typical diameter = 1.208" Rarity - 3	
Drapery die state: Full to partial Foot s		Foot support: Full	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45		Coin from the Bill Bugert Collection		
Cross reference: WB-101.				Version 2.34

### 1871-S WB-6, Very small thin top S

#### **Obverse 6**



• Centered date (photo)



- Heavy clash lines across Liberty's lap and in the drapery below Liberty's elbow (photo).
   These clash lines are still bold on LDS coins.
- Lump in gown below Liberty's right breast to the left of clash lines (photo).

#### **Reverse E**



• Very small thin top (<u>old</u> style) S mintmark positioned high, tilted to the right, and centered below the crotch (photo)



- Heavy diagonal (NW to SE) die lines (4) in the eagle's upper left wing feathers (photo). These lines fade with die state; on lower grade coins of F12 or better, at least one line is still visible.
- LDS: weak tail feathers and weak E1-3 and F1-3 vertical shield lines.

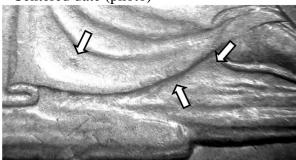
Date grid: M4, .020"		S: 144 reeds S: 143 reeds	Туріс	cal	diameter = 1.200"	Rarity - 3
Drapery die state: Full to partial		Foot support: Full I		D	Dentils: Obverse and Reverse - Full to weak	
Grade of coin depicted: AU55				Coin from the Bill Bug	gert Collection	
Cross reference: WB-101.						Version 2.34

# 1871-S WB-7, Small wide S

**Obverse 7** 



• Centered date (photo)



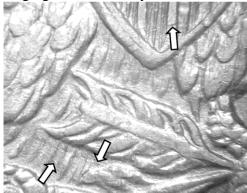
- Rust lump in Liberty's lower skirt (photo).
   This lump can be found but is weak on higher grade, late die state coins.
- Fine die lines: one behind Liberty's heel and in rock support along lower right skirt hem line (photo). These die lines fade quickly with advancing die state.







- Small wide S mintmark below, slightly to the right of the center of the crotch and slightly tilted to the right (above left photo)
- Faint die line extends from upper right serif of (W)E in motto (above right photo) visible on high grade coins only



- Two die lines in tail feathers below arrow feathers (photo). The upper die line fades quickly with die state.
- EDS: horizontal die line in bottom of shield (photo) fades with die state

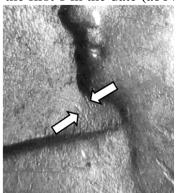
This is the first use of this reverse die.				
flat reeds	Typical	diameter = 1.210"	Rarity - 3	
Foot support:	Full	Dentils: Obverse - Ful	l; Reverse - Full	
Grade of coin depicted: AU53			gert Collection	
			Version 2.34	
	flat reeds	flat reeds Typical Foot support: Full	flat reeds Typical diameter = 1.210"	

### 1871-S WB-8, Small wide S

Obverse 8



- Centered date (above photo)
- Die crack from the rim between two dentils towards the first 1 in the date (above photo)

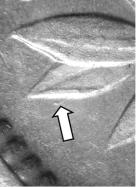


- Two parallel diagonal (NW to SE) die lines under Liberty's chin (photo)
- Recut stars 1-8 and 10-13





- **Small wide S** mintmark below, slightly to the right of the center of the crotch, and slightly tilted to the right (above photo)
- Fine die lines in the eagle's feathers above the olive branch (above photo)



- Small lint mark or die crack starting from the underside of second olive leaf (photo)
- The die lines in the shield and in the eagle's feathers visible on the EDS are only faintly visible.
- Die stress lines and signs of light rust can be found around the mintmark and above the motto's scroll.

This die marriage has the second use of this reverse die.					
Date grid: M4, .022"	143 r	eeds	Typical	diameter = 1.206"	Rarity - 4
Drapery die state: Full		Foot support:	Full	Dentils: Obverse - Ful	l; Reverse - Full
Grade of coin depicted: MS63				Coin from the Randy V	Wiley Collection
Cross reference: WB-101.					Version 2.34

### 1872-S

1872 saw the introduction of a new mintmark style and size, the medium-small S, at the San Francisco Branch Mint. Four obverse dies with minor date placement variations and three reverse dies (one small S and two medium-small S) are used in combinations for four die marriages. These die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	10	10	2
257,000	Shipped	-	10	10	(1/2 1/5)
	Known	4	4	3	(143, 145)

The two reverses dies with the new medium-small S style mintmark have no major discerning characteristics except mintmark placement and are best differentiated with side by side comparison. Shown in die identification keys table are side by side close up photographs of the mintmark area of both reverses to aid in your identification; note the differences in the distance of the mintmark above the D(OL).

All die marriages of 1872-S seem to have about the same relative scarcity, high R-3. It may take some time to find a nice problem free mid to high grade example for your collection but they can be found.

1050 0		Small wide S mintmark	Mintmark low above the left edge of the D(OL)	Mintmark very low above the left edge of the D(OL)
1872-S Obverse and Reverse die identification keys	<u>}</u>		S	
		Small wide S	Medium	-small S
		A	В	C
Date left and high	1	WB-1		
Date right	2	WB-2		
Date left and low	3		WB-3	
Date centered	4			WB-4

### 1872-S date grid quick reference table

Obverse date grid	Die Marriage
R1.5, .022"	WB-1
R1.5, .028"	WB-3
R2.5, .022"	WB-4
R3.5, .028"	WB-2

# 1872-S WB-1, Small wide S

Obverse 1



• Date high and to the left when compared with the other obverses of this date (photo)



- Small wide S mintmark high and below the crotch (photo)
- Weak tail feathers below shield

This is the first use of this reverse die. This die marriage is one of two obverses paired with a reverse die with a small wide S mintmark. It can be identified quickly by the mintmark size and the position of the date. Also, the reed count on this die pair is different (143 reeds) than that of the WB-2 (145 reeds).

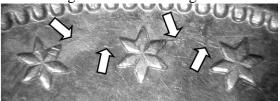
Date grid: R1.5, .022"	143 r	eeds	Typical	diameter = 1.203"	Rarity - 3+
Drapery die state: Full		Foot support:	Full	Dentils: Obverse - Ful	ll; Reverse - Full
Grade of coin depicted: AU50			Coin from the Bill Bug	gert Collection	
Cross reference: WB-101.					Version 2.34

### 1872-S WB-2, Small wide S

### Obverse 2



Date low and right when compared with the other obverses of this date (photo). LDS: die crack along the base of the digits.



- Die cracks thru stars 4, 5-6 to rim, and 10-12 (photo)
- Clash in the drapery below Liberty's elbow





- Small wide S mintmark high and centered below the crotch.
- Weak tail feathers below shield

This is the second use of this reverse die. This die marriage is one of two obverses paired with a reverse die with a small wide S mintmark. It can be identified quickly by the mintmark size and the position of the date. Also, the reed count on this die pair is different (145 reeds) than that of the WB-1 (143 reeds).

1 (1 10 100 005).		
Date grid: R3.5, .028" 145 reeds	Typical diameter =	= 1.205" Rarity – 3+
Drapery die state: EDS: Full	Foot support: EDS: Strong	Dentils: Obverse - Full
LDS: partial drapery	LDS: Weak below the toe	Reverse - Full
Grade of coin depicted: AU50	Coin from the	e Bill Bugert Collection
Cross reference: WB-101.		Version 2.34

## 1872-S WB-3, Medium-small S

### Obverse 3

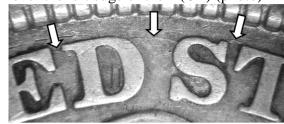


- Date left and low when compared with the other obverses of this date (photo)
- Clash marks in the drapery below Liberty's elbow and along Liberty's right leg
- Recut stars 2-4, 6, and 9-13
- Unfinished below Liberty's chin





• Medium-small S mintmark positioned low over the left edge of the D(OL) (photo)



- Die crack along the tops of the letters (UNIT)ED ST(ATES) (photo)
- Weak tail feathers below shield
- Clash in upper right shield

The mintmark position on this reverse die is very similar to the other reverse with a medium-small S mintmark.

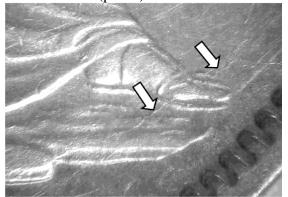
mmunaik.					
Date grid: R1.5, .028"	vertic	eeds with al lines een the reeds	Typical diameter = 1.207"		Rarity - 3+
Drapery die state: Full Foot suppor		Foot support:	Full	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45				Coin from the Bill Bug	gert Collection
Cross reference: WB-102.					Version 2.34

# 1872-S WB-4, Medium-small S

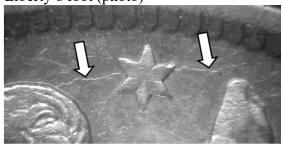
**Obverse 4** 



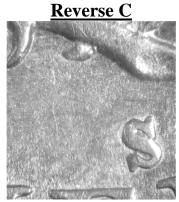
Centered date (photo)



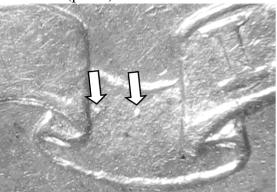
 Die crack diagonally thru the rock support and Liberty's foot (photo)



• Die crack from star 7 thru Liberty's head thru star 8 to the dentil above the cap (photo)



 Medium-small S mintmark positioned very low over the left edge of the D(OL) similar to reverse B (photo)



- Two small lumps visible on the scroll's left recessed area (photo). These should be visible on coins grading at least F15.
- Weak tail feathers below shield

The mintmark position on this reverse die is very similar to the other reverse with a medium-small S mintmark.

Date grid: R2.5, .022" 145 reeds		Typical	diameter = 1.207"	Rarity – 3+	
Drapery die state: Full Foot support: W		Weak	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU55			Coin from the Bill Bug	gert Collection	
Cross reference: WB-102.					Version 2.34

### 1873-S Arrows

1873-S is one of the few dates in the seated half dollar series with a single die marriage. The mintage of 228,000 pieces is high for a single die pair. Ordinarily, the dies would crack and become much worn after striking such a large mintage. The only known 1873-S reverse die does show some evidence of die wear (light cracking and worn details) but not as much as what would ordinarily be expected for a high mintage coin. Consequently, it is entirely possible that another die marriage exists.

There is only one size mintmark used in 1873-S, the minute S. One obverse die and one reverse die are used for one die marriage. This die marriage is known as depicted in the table below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	10	4	1
228,000	Shipped	-	Unknown	Unknown	(145)
	Known	1	1	1	(145)

1873-S Arrows Obverse and Reverse die identification keys	Minute S mintmark close to tip of the arrow feathers, weak tips of the lower left olive leaves and tail feathers, faint die crack above RIC and from the right base of (AMERIC)A to the upper arrow tip  Minute S  A
Large arrows, Open 3, vertical raised line in the upper right horizontal shield lines	WB-1

With the advent of the Mint Act of 1873, outfacing arrow heads were placed at opposite ends of the date to signify the planchet weight change from 192.0 ( $\pm$  1.5) grains to 192.9 ( $\pm$  1.5) grains. This planchet weight change is almost meaningless because the tolerances for planchet weights overlap between the old and new standards. Old unstruck planchets within the tolerance of the new standard could therefore be legally minted into with-arrows coinage.

Early in the year, the style of the 3 was changed from a closed 3 to an open 3 to avoid confusion of the 3 with an 8, especially on smaller denomination coinage. The exact date of this change is unknown but it occurred before April 1, 1873 when the new planchet weight standard was effective.

All known 1873-S halves have a large arrowhead on each side of the date and an open 3 in the date. Closed 3 1873-S halves with or without arrows at the date are unknown.

With just a single die marriage, a collector will have to settle for this die marriage for his collection. Most 1873-S halves seem to have a problem to some degree whether it is rough surfaces, low grade, damage, or cleaning. Finding a nice problem free example may be difficult.

**1873-S No-arrows**. 5,000 no-arrows pieces were minted in February 1873; a few have been rumored to exist but none have been authenticated. The 5,000 minted pieces have always assumed to have been destroyed when the Mint Act of 1873 took affect on April 1, 1873. But then, why were they not released into circulation in February and March? None have turned up; the common theory is they were not released into circulation and were all destroyed when the planchet weight standard was slightly changed and the addition of arrowheads by the date was mandated by this Act (see the discussion on the planchet weight change above). If one were to turn up, it would be the find of the century. A single no-arrows 1873-S assay coin was shipped to Philadelphia on March 5, 1873 but its disposition is unknown and most likely it was destroyed after being assayed.

Several are rumored or claimed to exist with one unverified in a Midwestern collection (The Wells Fargo Collection).

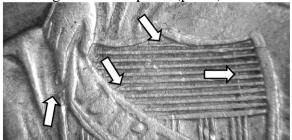
What would an 1873-S No-arrows half dollar look like? In preparation for the new year's coinage, half dollar dies for the 1873-S were shipped to the San Francisco Branch Mint late in 1872. It wasn't until January 18, 1873 that Chief Coiner of the Philadelphia Mint, A. Louden Snowden, sent a letter to the Director of the Mint, James Pollock directing his attention to the difficulties in distinguishing an 1873 dated coin from 1878. This "defect" precipitated a change from the closed 3 to an open 3 style date. Consequently, the 5,000 1873-S No-arrows coins, minted in February 1873, would have been struck using dies already on hand, with a <u>closed 3</u> style date. Additionally, the reverse mostly likely would have a <u>minute</u> (that used with 1873-S With-arrows pieces), or <u>small-wide or medium-small</u> (those used in 1872-S) S style mintmark. The edge collar would most likely have either <u>143 or 145</u> reeds (these were both used within the past two years).

### 1873-S Arrows WB-1

Obverse 1



• Date right with an open 3 (photo)



- Multiple die lines around Liberty's left hand and in the shield (photo). A long, heavy vertical die line within the horizontal shield lines in the upper right corner of the obverse shield. Diagonal die line in the upper center shield lines and to the left of Liberty's index finger.
- Recut stars 2-4
- Unfinished under Liberty's chin

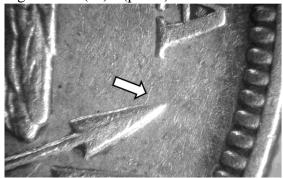
#### **Reverse A**



• Minute S mintmark high and to the left of the tip of the lower arrow feather (photo)



• Small lump visible on the scroll to the upper right of the (W)E (photo)



- Fine die crack along the tops of (AME)RICA and from the right base of the (AMERIC)A to the upper arrow head (photo)
- LDS: Weak olive leaf tips especially the second leaf
- Weak scroll edges above TRUST

The die characteristics of this lone die marriage for this date can be easily verified by using the diagnostics above. Another die marriage may exist but, if so, would likely be very rare.

Date grid: R4.5, .020"	145 reeds with lines between the reeds		Typical diameter = 1.209"		Rarity – 3+	
Drapery die state: EDS: Full		Foot support: EDS: Full		Dentils: Obverse - Full		
LDS: Partial		LDS: Weak		Veak	Reverse - Full	
Grade of coin depicted: XF45				Coin from the Bill Bugert Collection		
Cross reference: WB-101.					Version 2.34	

### 1874-S Arrows

This date has three distinct mintmark sizes (small wide S, medium-small S, and the minute S) which automatically make it a collector's favorite. Half dollars with the three sizes can be found with some searching with the medium-small S being scarcer. This date also has a super-rarity – a minute S with a different mintmark position. This die marriage was rumored to exist at the time Randy and I wrote the WB book in 1992 but we were unable to borrow the coin for study. The California owner recognized its rarity and feared its loss through the mail but, ultimately, we got our hands on it and it is featured as die marriage WB-4. After many years of searching, Randy and I have not been able to locate another.

With the advent of the Mint Act of 1873, outfacing arrow heads were placed at opposite ends of the date to signify the planchet weight change from 192.0 ( $\pm$  1.5) grains to 192.9 ( $\pm$  1.5) grains. This weight change is almost meaningless except for heavy planchets because the tolerances for planchet weights overlap between the old and new standards. Old unstruck planchets within the tolerance could therefore be legally minted into with-arrows coinage.

All known 1874-S halves have large arrows. It is entirely possible that an 1874-S with small arrows may be located. The small arrows are known for 1873-P and 1874-P coins and the same logotype with small arrows may have been used for a San Francisco die(s) in 1874.

Three obverse dies with very similar date placements and four reverse dies are used in combinations for four die marriages. These die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	2
394,000	Shipped	-	Unknown	Unknown	(144, 145)
	Known	4	3	4	(144, 143)

### 1874-S date grid quick reference table

Obverse date grid	Die Marriage
M5.5, .018"	WB-4
R1, .022"	WB-1
R1.5, .024"	WB-2
R1.5, .026"	WB-3

1874-S Arrows Obverse and Reverse die identification keys		Mintmark centered below crotch	Mintmark very low above the left edge of the D(OL); horizontal die line to right from bottom shield tip	Mintmark high and to the left; die lines below (UNIT)E(D); vertical die lines in eagle's left wing; lump in (TR)U(ST)	Mintmark slightly lower and more to the right than reverse C
				S	
		Small wide S	Medium-small S	Minute S	
		A	В	C	D
Date right; large lump in Liberty's lap	1	WB-1			
Lumps in gown adjacent to Liberty's left forearm; large lump above right bust line	2		WB-2	WB-3	
Date left	3				WB-4

## 1874-S Arrows WB-1, Small wide S

#### Obverse 1



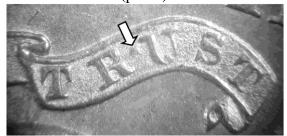
• Date right (photo)



- Large lump in Liberty's lap to the left of the pole base (photo)
- Unfinished under Liberty's chin



 Small Wide S mintmark high and centered below the crotch (photo)



- Large lump on scroll between (T)RU(ST) (photo)
- Unfinished in upper right shield

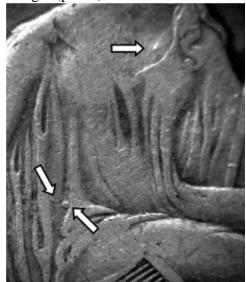
Date grid: R1, .022"		eeds with lines een the reeds	Typical diameter = 1.208" Rarity -		
Drapery die state: Full	Drapery die state: Full Foot support: Full		Dentils: Obverse - Full; Reverse - Full		
Grade of coins depicted: Bugert VF30, Wiley MS62			Coins from the Bill Bugert C the Randy Wiley Collection	ollection and	
Cross reference: WB-101.				Version 2.34	

#### 1874-S Arrows WB-2, Medium-small S

Obverse 2

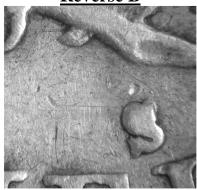


• Date right (photo)

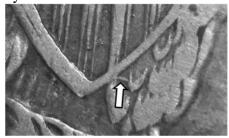


- Three large lumps on Liberty; one above her right bust line and two above the shield to the right of her left forearm (photo)
- Unfinished under Liberty's chin

Reverse B



Medium-small S mintmark low and above the left edge of the D(OL) (photo). This mintmark is almost blob-like; the upper loop is completely filled in and the lower loop is nearly closed.



 Heavy horizontal die line to the right of the lower shield tip (photo)



• LDS: die crack from the rim, along the right edge of (A)M(ERICA) into the field (photo)

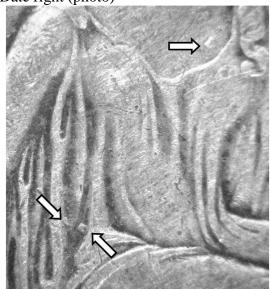
This is the first use of this obverse die.								
Date grid: R1.5, .024"	144 reeds		Typical diameter = 1.201"		Rarity - 5			
Drapery die state: Full Foot support: Full		1	Dentils: Obverse - Full; Reverse - Full					
Grade of coin depicted: EDS - VF35, LDS - F12				Coins from the Bill Bugert Collection				
Cross reference: WB-102.					Version 2.34			

# 1874-S Arrows WB-3, Minute S

Obverse 2



• Date right (photo)

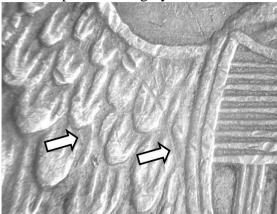


- Three large lumps on Liberty; one above her right bust line and two above the shield to the right of her left forearm (photo)
- Unfinished under Liberty's chin
- This die appears to have about the same die state as when paired with WB-2. The drapery is weaker and the foot support is slightly weaker.





• Minute S mintmark placed high and left of the feather tip (photo). This reverse should not be confused with the rare WB-4 which has a different mintmark position; side-byside comparison is highly recommended.



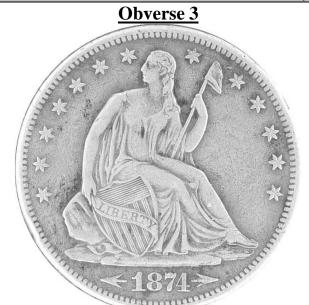
Two nearly vertical die lines in the feathers of the eagle's left wing (photo)



- Small lump in (TR)U(ST) (photo)
- Weak tail feathers below shield

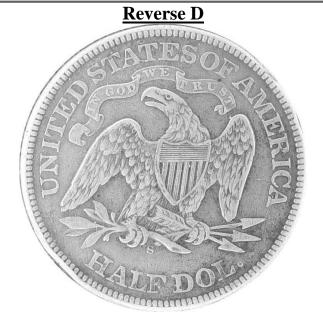
This is the second use of this obverse die.						
Date grid: R1.5, .026"	144 reeds	Typical diameter = 1.208"	Rarity - 3			
Drapery die state: Full	Foot support: Full to partial (LDS)	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: AU	Grade of coin depicted: AU50 Coin from the Bill Bugert Collection					
Cross reference: WB-103.		Version 2.34				

# 1874-S Arrows WB-4, Minute S





• Date left (photo). The date of this obverse die has the left arrow head slightly more to the left and lower than WB-3.





 Minute S mintmark (photo) unlike that found on 1874-S WB-3 or on 1873-S (side-by-side comparison is recommended). This mintmark position is lower and more to the right than the others; this feature is the key to identifying this die.

This die marriage is currently unique and the photographed coin belongs to a prominent California collector. It is a pairing of new obverse and new reverse dies and was rumored but unverified at the time Randy and I wrote the WB book. The mintmark position is the key to identifying this die marriage; it is lower and more to the right than the other more common minute S reverse for this date.

Date grid: M5.5, .018"	145 reeds Typical		diameter = 1.207"	Rarity - 8	
Drapery die state: Full Foot support:			Full	Dentils: Obverse - Ful	ll; Reverse - Full
Grade of coin depicted: XF	740		Coin in a California co	ollection	
Cross reference: WB-103 but unverified then.					Version 2.34

180

#### 1875-S

1875-S is one of the most common dates in the Liberty Seated Half Dollar series. For that reason, its' collecting merits are often overlooked and readily dismissed as not worthy of attention. In fact, this date has attractions: comparatively low pricing, rare die marriages, four mintmark sizes, a blundered date, recut mintmark, and most of the dies are readily distinguishable by the lumps, cuds, die lines, and die cracks.

Late die states of this date are riddled with extensive die cracks, notably the reverse dies. Many of these cracks have very similar appearances between dies and, hence, require very close scrutiny when relying on die cracks alone to attribute die marriages. For that reason, the many die lines, lumps, or cuds are highlighted in the variety descriptions.

Most of the dies of this date have a very small S mintmark of a different style than those of 1866-1871-S. Besides the similarities in die cracks, almost all have a very similar position and the dies can be difficult to distinguish by mintmark position alone.

Coins of this date are found with concave/convex ("dished") surfaces and can be easily detected by "rocking" a coin, even in a 2 x 2 holder, on a flat surface. The reasons for this vary with different theories and I will just make this observation.

For those of you that collect by reed counts, most die marriages of this date have 148 reeds. Only two die marriages have the scarcer reed count of 147 reeds: those with the Spiked 5 and errant 1 from rock obverses.

Twenty-two die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	6	0	2
2,456,000	Shipped	-	Unknown	Unknown	(147, 148)
	Known	22	16	15	(147, 146)

#### 1875-S Date grid quick reference table

Obverse date grid	Die Marriage
M2.5, .016"	WB-18
M3, .022"	WB-20
M3.5, .019"	WB-16
M3.5, .022"	WB-21
M3.5, .022"	WB-22
M3.5, .022"	WB-6
M4, .014"	WB-1
M4, .016"	WB-3
M4, .016"	WB-8
M4, .017"	WB-4
M4, .017"	WB-5
M4, .018"	WB-19
M4, .020"	WB-2
M4.5, .016"	WB-9
M4.5, .020"	WB-7
M4.5, .025"	WB-14
M4.5, .025"	WB-17
M4.5, .026"	WB-15
M5, .020"	WB-10
M5, .022"	WB-11
M5.5, .024"	WB-12
M5.5, .024"	WB-13

1875-S Obverse and Reverse die identification keys	•	Medium-small S mintmark	Small wide S mintmark	Recut S	Rust lumps on upper left wing adjacent to shield	Vertical die line in the left wing adjacent to the shield	Diagonal die line in eagle's left wing	Vertical die line between WE	Die crack on legend	Small lump in eagle's left wing
Dont 1		A	В	C	D	E	F	G	Н	I
Part 1		9	S						8	8
Die crack along base of date	1	WB-1								
Die damage diagonally thru shield	2		WB-2							
Small lump on the outside lower left edge of the shield	3			WB-3						
Die line left of Liberty's hand	4			WB-4	WB-5					
Large lump in lower shield	5					WB-6				
Scattered lines in and around shield	6					WB-7				
Lump in rock by Liberty's left fingers	7					WB-8	WB-9			
Lump along rock support under Liberty's heel	8						WB-12	WB-10	WB-11	WB-13
Die lines below clasp (Table continued of	9				WB-15		WB-14			

(Table continued on next page)

(Table continued from previous page)

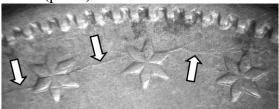
continued from pre		P = 8 = 7			1		
1875-S Obverse and Reverse die identification keys		Die crack along top of (AME)RICA(A)	Oblong shaped lump at base of T(RUST)	Die crack thru (STAT)ES OF	Micro S mintmark	Diagonal line in upper tip of shield	Diagonal line in eagle's upper left wing
		Verv s	mall S min	tmark	Micro S	Verv s	mall S
Part 2	Part 2		K	L	M	N	O
					8		
Lump in							
Liberty's gown	10	<b>WB-16</b>					
to right of scroll							
Spiked 5	11		<b>WB-17</b>				
Errant 1 from rock support	12			WB-18			
Lumps in shield's lower left	13				WB-19		
Radial die crack near star 13	14					WB-20	
Lump inside Liberty's right knee	15					WB-22	WB-21

## 1875-S WB-1, Medium-small S

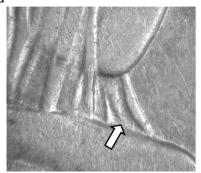
Obverse 1



• Centered date slanting down to the right with a die crack along the base of the digits into the fields on each side of the date (photo)



 Extensively cracked obverse nearly around the entire circumference thru the stars (stars 1-3 in photo), cap, and Liberty's head

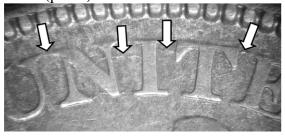


- Scattered die lines in the drapery below Liberty's elbow (photo)
- Unfinished under Liberty's chin

**Reverse A** 



 Medium-small S mintmark low in the field above the space between (HAL)F D(OL) and tilted to the left (photo)



- Cracked die thru UNITED (photo), STATES OF AMERICA, and (HA)LF DO(L)
- Weak feathers in the eagle's left wing near the shield
- Weak scroll edge near the upper left of the eagle's left wing
- Clash in the lower right shield

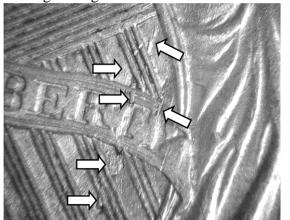
This is a very scarce variety often found in low grades; rare in XF and above.						
Date grid: M4, .014"	ate grid: M4, .014" 148 reeds		Typical diameter = $1.203$ " Rarity - $4$			
Drapery die state: Partial Foot support: Weak			Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection			
Cross reference: WB-103.			Version 2.34			

## 1875-S WB-2, Small wide S

Obverse 2



• Centered date slightly slanting down to the right (photo). LDS: very faint die crack along the digits of the date



- Very heavy die damage diagonally thru the shield and scroll (photo)
- Faint die crack from Liberty's toe towards star 13 and from the left rock support towards star 1
- Unfinished under Liberty's chin
- EDS: no clash with full drapery
- MDS/LDS: Clash marks in drapery

**Reverse B** 



• Small wide S mintmark below the crotch (photo)



- Die cracks thru the motto at (TR)UST and on the letters (STATE)S OF AM(ERICA) (photo)
- Weak tips of olive leaves
- Light clash in lower right shield

This is a scarce variety. Rare error examples have been seen of this variety including railroad rim, broadstruck, and off-center coins.

Date grid: M4, .020"	Date grid: M4, .020" 148 reeds		Typical diameter = $1.207$ " Rarity - 4		
Drapery die state: Full to weak (LDS)	1	Foot support: Weak	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU55			Coin from the Bill Bugert Collection		
Cross reference: WB-104.			Version 2.34		

## 1875-S WB-3, Recut S

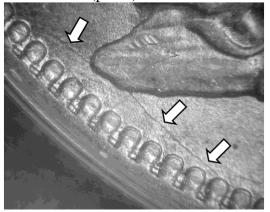
Obverse 3



Centered date (photo)

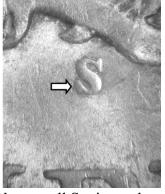


 Small lump on the outside lower left edge of the shield (photo)



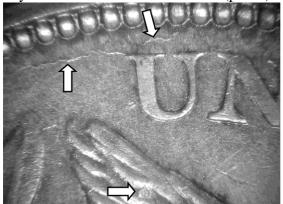
- Die crack from the dentils thru the rock support to the dentils (photo). Another die crack from star 7 thru Liberty's head
- Die crack from the rim into the field between stars 11 and 12

Reverse C

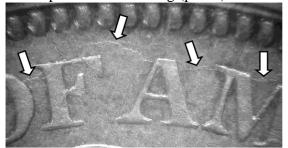




Very small S mintmark recut to SE (photo)



• Die cracks in field to left and above UN(ITED) and lump in lower left wing (photo)



- Die crack thru and above OF AMER(ICA) (photo)
- Heavy diagonal (NW to SE) die line in the feathers of the upper left wing
- Weak olive leaf tips

This is the first use of this reverse die.							
Date grid: M4, .016"	Unkı	Jnknown reeds T		pical diameter = Unknown"	Rarity - 4		
Drapery die state: Full Foot support: Strong			g	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: PCGS MS61				Coin from the Dick Osburn Collection			
Cross reference: WB-102.				Version 2.34			

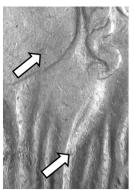
## 1875-S WB-4, Recut S

Obverse 4

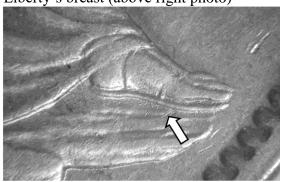


Date right (photo)





• Heavy die line to the left of Liberty's left hand (above left photo) and two small lumps on Liberty's breast (above right photo)

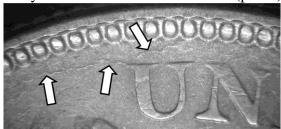


- Diagonal die line into rock support from Liberty's foot (photo)
- Unfinished under Liberty's chin
- Recut stars 2-4 and 11-13

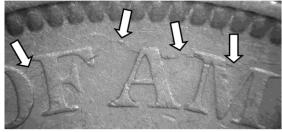
**Reverse C** 



Very small S mintmark recut to SE (photo)



 Die cracks in field to left and above UN(ITED) (photo)



- Die crack thru and above OF AMER(ICA) (photo)
- Weak olive leaf tips

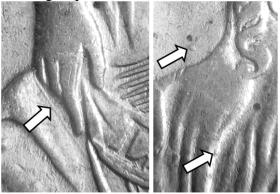
TD1 ' ' (1 C' )	C .1 .	1 1'	1.1 1	C .1 *	1.
This is the first use	ant thic	Obverse die	and the second	lice of this re	verse die
Timo io uie imot uo	or uns	obverse are	and the second	use or uns re	verse ure.

Date grid: M4, .017"	148 reeds		Γ	Typical diameter = 1.212" Rarity - 3	
Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU55				Coin from the Randy Wiley (	Collection
Cross reference: WB-102.					Version 2.34

Obverse 4



Date right (photo)

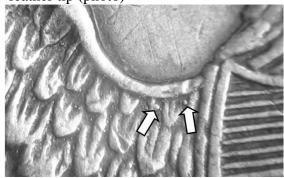


- Heavy die line to the left of Liberty's left hand (above left photo) and two small lumps on Liberty's breast (above right photo)
- The diagonal die line into rock support from Liberty's foot when paired on WB-4 is polished off the die.
- Unfinished under Liberty's chin
- Recut stars 2-4 and 11-13

**Reverse D** 



Very small S mintmark centered below the feather tip (photo)



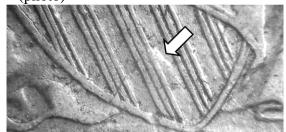
- Rust lumps on the upper left wing adjacent to the shield (photo)
- Weak tail feathers below shield and olive leaf tips

This is the second use of this obverse die.					
Date grid: M4, .017" 148 reeds Typical diameter = 1.211" Rarity - 3					
Drapery die state: Full Foot support: Weak		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF45			Coin from the Randy Wiley Collection		
Cross reference: WB-101.				Version 2.34	

Obverse 5



 Centered date with a small lump along the base of the rock support above the 1 (photo)

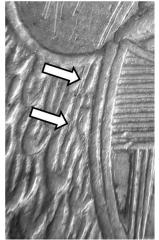


- Large lump in the recessed area of the of the lower shield (photo)
- Clash line in the drapery below Liberty's elbow and in the gown
- Recut stars 11-13
- Unfinished under Liberty's chin

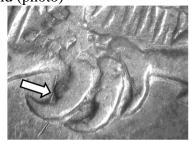
Reverse E



• Very small S mintmark below the crotch (photo). Unfinished inside the mintmark



• Vertical die line in eagle's left wing adjacent to the shield (photo)



- Vertical die line in the eagle's left claw (photo)
- Clash in the lower right shield and below the eagle's right wing
- Inside lower edge of the shield unfinished

This is the first use of this reverse die.

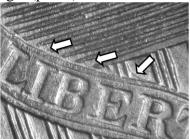
Date grid: M3 5 022" | 148 reeds

Date grid: M3.5, .022"   14	8 reeds	Typical diameter = 1.208"	Rarity - 3
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF4	0	Coin from the Bill Bugert Co	ollection
Cross reference: WB-101.			Version 2.34

Obverse 6



• Date right (photo)

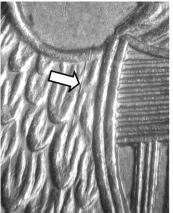


- Scattered die lines in and around the recessed area of the shield (photo)
- Die crack from star 8 above the cap and from star 10 to star 11
- Recut stars 3, 4, and 6

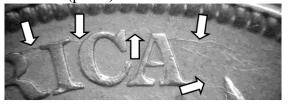
**Reverse E** 



 Very small S mintmark below the crotch (photo). Unfinished inside the mintmark



• Vertical die line in eagle's left wing adjacent to the shield (photo) and in left claw



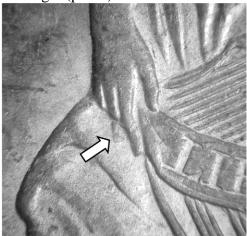
- Die crack from H(ALF) thru olive leaves and above (AME)RICA to arrow the upper arrow head (photo)
- Clash marks in the lower right shield and below the right wing

This is the second use of this reverse die.					
Date grid: M4.5, .020"	148 reeds		Typical diameter = 1.208"	Rarity - 3	
Drapery die state: Full		Foot support: Weak below toes	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58		Coin from the Randy Wiley Collection			
Cross reference: WB-101.				Version 2.34	

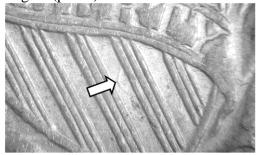
#### Obverse 7



• Date right (photo)



• Lump in rock support by Liberty's left fingers (photo)

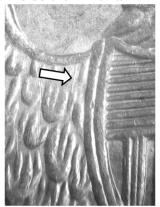


- Arching die line in the recessed area of the shield below (LIBE)R(TY) (photo)
- Unfinished under Liberty's chin

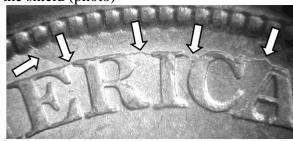




Very small S mintmark below the crotch (photo).
 Unfinished inside the mintmark



• Vertical die line in eagle's left wing adjacent to the shield (photo)



- Extensive die cracks nearly around the entire circumference. Prominently from the dentil above E thru tops of (AME)RICA to arrow the upper arrow head (photo)
- Clash marks in the lower right shield and below the right wing

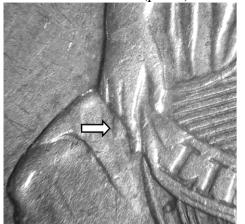
This is the first use of this obverse die and the third use of this reverse die.

Date grid: M4, .016"	148 reeds		Typical diameter = 1.207" Rarity - 3	
Drapery die state: Full Foot support: Strong		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS63			Coin from the Bill Bugert Collection	
Cross reference: WB-101.			Version 2.34	

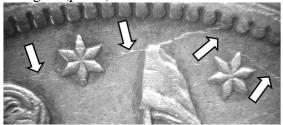
Obverse 7



• Date right with a die crack from the left of the date thru the 1 to the base of the 8 to the dentils below the 5 (photo)



• Lump in rock support by Liberty's left fingers (photo)

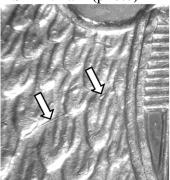


- Extensively cracked die notably around Liberty's head, cap, and stars 8 and 9 (photo) thru stars 10-13
- The arching die line in the shield found on WB-8 is not visible here.

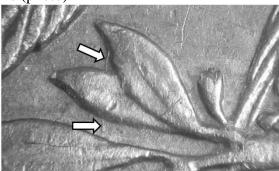
**Reverse F** 



• Very small S mintmark (photo)



 Diagonal (NE to SW) die line in the eagle's left wing to the left of the lower horizontal shield line (photo)



- Vertical die line in the recessed area between the upper two leaves (photo)
- Weak tail feathers

This is the second use of this obverse die and the first use of this reverse die.

Date grid: M4.5, .016" 148 reeds Typical diameter = 1.210" Rarity - 3

Drapery die state: Partial Foot support: Strong Dentils: Obverse - Full; Reverse - Full

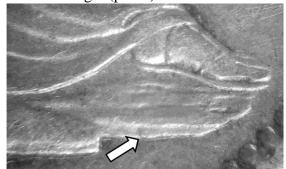
Grade of coin depicted: AU50 Coin from the Bill Bugert Collection

Cross reference: WB-101. Version 2.34

Obverse 8



Date far right (photo)



- Lump along the base of the rock support below Liberty's heel (photo)
- Recut stars 2-4, 6, and 12
- Unfinished under Liberty's chin





Very small S mintmark below the crotch and tilted to the right (photo)



Vertical die line between WE in the motto (photo)





- EDS: Right wing, no cud (above left photo)
- LDS: Right wing with cud (above right photo)



LDS: Die cracks nearly around the entire circumference on outer letter edges ((AME)RICA in photo), thru the arrow heads, and olive leaves

This is the first use of this obverse die.						
Date grid: M5, .020"	148 weak reeds	Typical diameter = 1.205"	Rarity - 3			
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Rev	erse - Full			
Grade of coin depicted: I		EDS coin from the Bill Bugert				
LDS - AU58		LDS coin from the Randy Wiley Collection				
Cross reference: WB-10	1.		Version 2.34			

Obverse 8



• Date far right with a die crack along the base of the digits almost to the dentils to the left (photo)

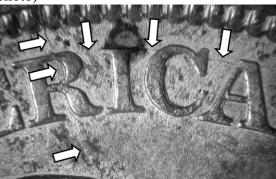


- "L" shaped die crack from field towards star 1 and from dentil to crack (photo)
- Lump along the base of the rock support below Liberty's heel
- No recut stars
- Unfinished under Liberty's chin
- Light clash mark in the drapery below Liberty's elbow





 Very small S mintmark centered under the crotch (photo)



• Extensively cracked die notably from rim thru (AME)R(ICA) to the eagle's right wing (photo) and above the letters OF AMERICA to the DOL.

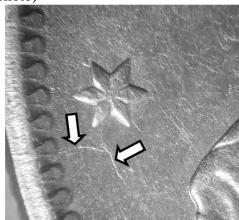


- Die cracks from rim above (ST)AT(ES) thru the (S)T(ATES) to the scroll (photo). Other cracks thru the olive leaves and above UNITED.
- Weak tail feathers below shield

This is the second use of the obverse die.					
Date grid: M5, .022"	148 r	reeds	Typical diameter = 1.210"	Rarity - 3	
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: MS61			Coin from the Randy Wiley	Collection	
Cross reference: WB-101.				Version 2.34	

**Obverse 8** 

Date far right with a die crack along the base of the digits to the dentils to the left (photo)

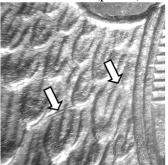


- "T" shaped die crack from field to star 1 and from dentil to crack (photo)
- Lump along the base of the rock support below Liberty's heel
- No recut stars
- Unfinished under Liberty's chin

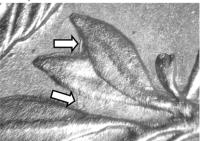




Very small S mintmark (photo)



Diagonal (NE to SW) die line in the eagle's left wing to the left of the lower horizontal shield line (photo)



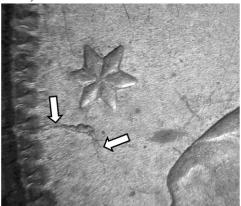
- Vertical die line in the recessed area between the upper two leaves (photo)
- Unfinished in recessed area between the vertical shield lines

This is the third use of this obverse die and the second use of this reverse die.					
Date grid: M5.5, .024" 148 reeds			T	ypical diameter = 1.211"	Rarity - 3
Drapery die state: Partial Foot support: Strong			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS62				Coin from the Randy Wiley (	Collection
Cross reference: WB-101.					Version 2.34

**Obverse 8** 



Date far right with a heavy die crack along the base of the digits to the dentils to the left (photo)



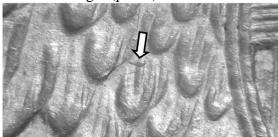
- "T" shaped die crack from field to star 1 and from dentil to crack (photo). Another die crack from the dentils in front of Liberty's toes up to between star 13 and the dentils.
- Lump along the base of the rock support below Liberty's heel
- No recut stars
- Unfinished under Liberty's chin

This is the fourth use of this obverse die.					
Date grid: M5.5, .024"	148 reeds		Typical diameter = 1.211"	Rarity - 3	
Drapery die state: Partial Foot support: Weak		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: MS63			Coin from the Randy Wiley C	Collection	
Cross reference: WB-101.				Version 2.34	

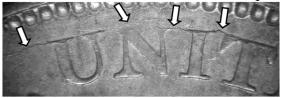
**Reverse I** 



Very small S mintmark centered under crotch tilted to the right (photo)



Small lump in the eagle's left wing to the lower left of the lowest horizontal shield line (photo)

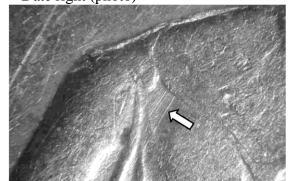


Die cracks around the letters UNITED (photo) and OF AMERICA

Obverse 9



Date right (photo)

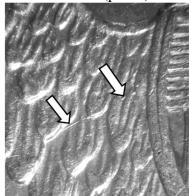


- Fine diagonal die lines below the clasp in the recessed area on Liberty's left shoulder (photo)
- Unfinished under Liberty's chin

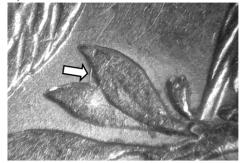




• Very small S mintmark (photo)



• Diagonal (NE to SW) die line in the eagle's left wing to the left of the lower horizontal shield line (photo)



- Vertical die line in the recessed area between the upper two leaves (photo)
- Horizontal die lines in the tail feathers below shield
- Weak tail feathers below shield

This is the third use of this reverse die.						
Date grid: M4.5, .025"	148 reeds		Typical diameter = 1.210" Rarity - 3			
Drapery die state: Full Foot support: Strong		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF48			Coin from the Randy Wiley Collection			
Cross reference: WB-101.			Version 2.34			

#### Obverse 9



• Date right (photo)

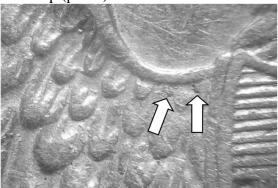


- Fine diagonal die lines below the clasp in the recessed area on Liberty's left shoulder (photo)
- Unfinished under Liberty's chin





• Very small S mintmark centered below the feather tip (photo)



 Rust lumps on the upper left wing adjacent to the shield (photo)



- Line on inside of eagle's left claw (photo)
- Weak tail feathers, olive leaf tips, scroll edges, arrow heads, and tops of some letters in the legend and denomination
- Clash in lower right shield

This is the second use of this obverse die and the second use of this reverse die.

Date grid: M4.5, .026" | 148 reeds | Typical diameter = 1.210" | Rarity - 3

Drapery die state: None | Foot support: Weak | Dentils: Obverse - Full; Reverse - Weak

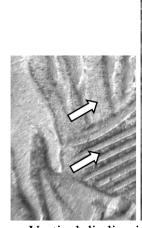
Grade of coin depicted: XF4U | Coin from the Bill Bugert Collection

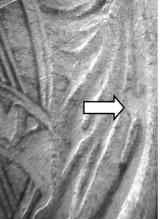
Cross reference: WB-101. | Version 2.34

Obverse 10



 Centered date with a small lump in the skirt loop above the rock support (photo).
 LDS with a die crack along the base of the digits of the date.





- Vertical die line in the horizontal shield lines and above the shield's upper left edge (above left photo); Lump in Liberty's gown to the right of the scroll (above right photo)
- LDS: extensively cracked die with cracks from the rock support thru stars 1-3, above Liberty's head, and thru stars 10-13 to Liberty's foot

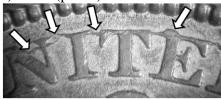




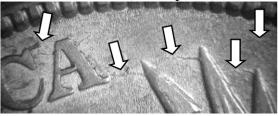
• Very small S mintmark below crotch and tilted to the right (photo)



 EDS: die crack along the tops of letters (AME)RICA (photo)



LDS: Die crack nearly around the entire circumference thru the legend, denomination and olive leaves; notably, a heavy die crack and small cud above UNITED (above photo) and thru the arrow heads (below photo)



• Weak tail feathers below shield

Date grid: M3.5, .019"	148 reeds	Typical diameter = 1.208"	Rarity - 3
Drapery die state: Weak Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: EDS - XF40		EDS coin from the Bill Bugert Collection	
LDS - AU55		LDS coin from the Randy Wiley Collection	
Cross reference: WB-101	1.		Version 2.34

## 1875-S WB-17, Spiked 5

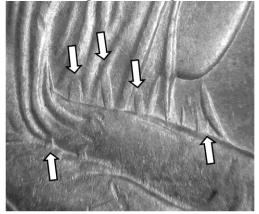
Obverse 11



• Date right and low (photo)



• Die line, "Spike," protruding from upper left of the 5 (photo); stronger on EDS



- Heavy clash lines in Liberty's lap and in the drapery below her elbow (photo)
- Light die cracks from rock support towards star1, along stars 2-6, star 8 to cap to star 9, and along stars 11 and 13
- Unfinished under Liberty's chin
- Recut star 11

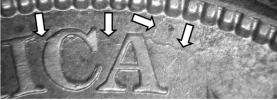




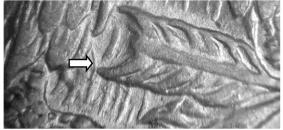
• Very small S mintmark below the crotch (photo)



• Oblong shaped lump at the right base of T(RUST) (photo); crack along top of (TR)UST



 Lightly cracked die around the top of UNITED, AMERICA (photo), and thru HALF DOL



- Arching die line to the left of the upper arrow feathers (photo)
- Weak tail feathers below shield

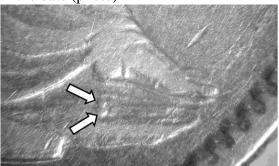
Date grid: M4.5, .025"	147 reeds		Т	Typical diameter = 1.209" Rarity - 3	
Drapery die state: Partial Foot support: Strong			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS61				Coin from the Randy Wiley O	Collection
Cross reference: WB-101.					Version 2.34

## 1875-S WB-18, Errant 1 from Rock

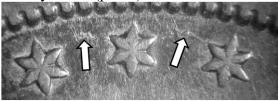
**Obverse 12** 



• Date far left with the base of an errant 1 protruding from the rock support above the 1 in the date (photo)

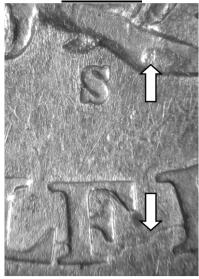


 Double lump in the rock support below Liberty's heel (photo)



- Die cracks along stars 11 thru 13 (photo)
- Unfinished under Liberty's chin
- Clash marks in the drapery under Liberty's elbow and between the pole and right forearm

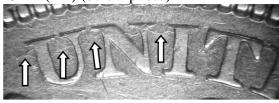
**Reverse** L



 Very small S mintmark with a small lump in the recessed area of the stem's end and die cracks thru HALF DOL (photo)



 Die cracks from K-12 thru K-9; prominently thru (STAT)ES OF (above photo) and thru UNIT(ED) (below photo)



- Clash marks in the lower right shield and beneath the eagle's right wing
- Weak tail feathers below shield

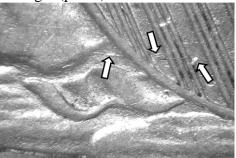
Date grid: M2.5, .016"   147 the r		reeds with line between eeds	Typical diameter = 1.203"	Rarity - 4		
Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: 2	XF45		Coin from the Bill Bugert Collection			
Cross reference: WB-103	1, MPI	D-001.		Version 2.34		

## 1875-S WB-19, Micro S

Obverse 13



• Date right (photo)



 Die lines and a lump in the lower left shield and above the ribbon (photo)



- "Omega" shaped lint mark on Liberty's chest (photo). This mark will only be visible on very high grade coins.
- Recut stars 3, 4, 6, and 11-13
- Unfinished under Liberty's chin

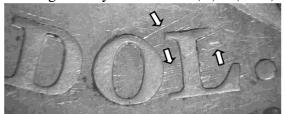




Micro S mintmark centered in the field between the feather tip and the top of (HAL)F (photo)



• Diagonal die lines around and between the olive leaves (photo). Other scattered die lines including a heavy line beneath (U)NI(TED)



• Die lines between the letters DOL (photo), around the eagle's beak, and in the eagle's tail feathers below the shield

This variety is rare and known coins are usually found in very low grades. Through a cooperative effort of many collectors and dealers, I have been able to document the existence of only 29 examples in the following grades: MS-0, AU-3, XF-0, VF/F-3, and VG/AG-23. Others likely exist.

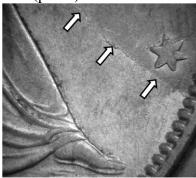
in the following grades. The cyfile cyfile cyfile at the state interpretation										
Date grid: M4, .018"	148 reeds		Typical diameter = 1.212"	Rarity - 5						
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full							
Grade of coin depicted: A	AU58,	finest known	Coin from the Randy Wiley	Collection						
Cross reference: WB-105	5.			Version 2.34						

#### Obverse 14

Reverse N

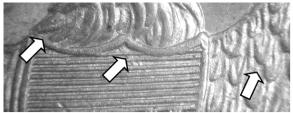


• Date left (photo)

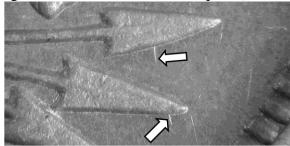


- Die crack from the dentils near star 13 into the field (photo)
- Light die crack from star 7 to cap to stars 8-11
- Unfinished under chin
- Recut stars 3, 4, 6, 11, and 12

• Very small S mintmark below feather tip tilted slightly to the right (photo). The mintmark is unfinished inside.



• Heavy diagonal (NW to SE) die lines in the upper center horizontal shield lines and two scattered die lines, one at the upper left shield edge and another in the eagle's feathers to the right of the middle shield lines (photo)



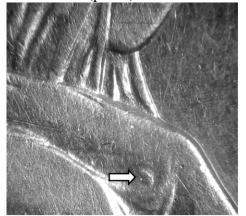
- Die lines along the lower edges of the upper two arrow heads (photo)
- Weak tail feathers below shield
- Fine die line from dentil thru the left serif of the (H)A(LF)

This is the first use of this reverse die.										
Date grid: M3, .022"	148 r	reeds	Typical diameter = 1.211"	Rarity - 3						
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full							
Grade of coin depicted: M	MS63		Coin from the Randy Wiley	Collection						
Cross reference: WB-101	1.			Version 2.34						

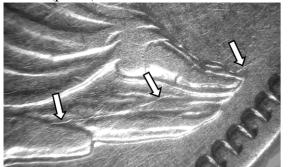
#### Obverse 15



• Centered date (photo)



• Large lump on the inside of Liberty's right knee (photo)

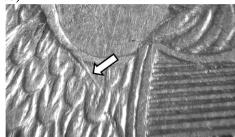


- Die crack thru rock support and Liberty's foot into field above toe (photo)
- Unfinished below Liberty's chin

**Reverse O** 



• Very small S mintmark below the feather tip (photo)



• Diagonal die line in the eagle's upper left wing near the shield (photo)



- Horizontal die line to the left of WE (photo)
- Horizontal die lines in the tail feathers below shield
- Weak tail feathers below shield
- Weak scroll edges near upper left wing

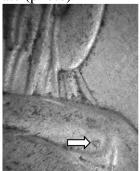
A rare broadstruck error example of this variety is known

11 Tare broadstruck error example of this variety is known.										
Date grid: M3.5, .022"	148 ı	eeds	Typical diameter = 1.211"	Rarity - 3						
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reve	erse - Full						
Grade of coin depicted: 2	KF40		Coin from the Randy Wiley (	Collection						
Cross reference: WB-101	l.			Version 2.34						

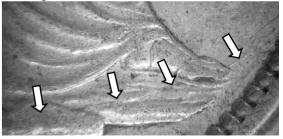
**Obverse 15** 



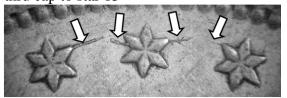
• Centered date (photo)



• Large lump on the inside of Liberty's right knee (photo)



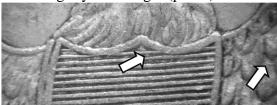
• Cracked die thru rock support and Liberty's foot into field above toe (above photo), thru stars 1-3 (below photo), stars 4-6, above star 8 thru cap to star 13



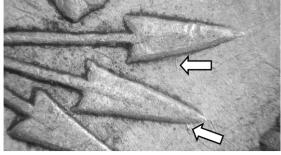




• Very small S mintmark below feather tip tilted slightly to the right (photo)



• Heavy diagonal (NW to SE) die lines in the upper center horizontal shield lines and a die line in the eagle's feathers to the right of the middle shield lines (photo)



- Die lines along the lower edges of the upper two arrow heads (photo)
- Weak tail feathers below shield
- Fine die line from dentil thru (H)A(LF)

This is the second use of this obverse die and the second use of this reverse die.									
Date grid: M3.5, .022"	148 r	reeds	Typical diameter = 1.209"	Rarity - 3					
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full						
Grade of coin depicted: 2	XF45		Coin from the Bill Bugert Col	llection					
Cross reference: WB-101	l.			Version 2.34					

#### 1876-S

With a very high mintage, there are plenty of die marriages to challenge the collector. With at least forty-three die marriages, this date includes two mintmark sizes: the micro S and the very small S. There are also two reverse hubs although the type 2 is very rare. Most of the die marriages are not cracked (as is 1875-S), but there are plenty of interesting diagnostics (multiple lumps, lines, die gouges, minor die cracks) to distinguish the dies.

As mentioned in the introductory section, I believe there are more 1876-S die marriages yet to be discovered. There are just too many dies and too high a mintage for me to feel confident all the 1876-S die marriages have been discovered and documented. This *Register* is an excellent starting point for 1876-S and 1877-S. As a case in point, Randy's and my *Complete Guide* listed 25 die marriages in 1993. Now, 16 years later, we have almost doubled that number and more are likely out there to be discovered by alert numismatists. If your die marriage is not listed here, it is mostly likely a new one and I ask that you contact Randy or I to get it properly documented.

The estimated rarities for most of the 1876-S die marriages are at best my educated guesses. With so many die marriages (43 listed herein with more yet to be documented) and so many 1876-S coins available (I estimate as many as 15,000 or more), true rarity rarities will take years of study once a die marriage baseline such as this reference is established and used. For the rarer die marriages, I have more confidence in the rarity estimates.

Like 1875-S, coins of this date are found with concave/convex ("dished") surfaces which can be easily detected by "rocking" a coin, even in a 2 x 2 holder, on a hard flat surface. The reasons for this vary with different theories and I will just make this observation.

For those of you that collect by reed counts, it is worthwhile summarizing the four different reed counts for his date. Die marriages with two of the four (147 and 148) are common while the other two (149, 150) are scarce or rare with only two or three die marriages each.

Forty-three die marriages are known as depicted in the tables below.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	4
4,528,000	Shipped	-	Unknown	Unknown	(147, 148, 149, 150)
	Known	43	37	31	(147, 140, 149, 130)

## 1876-S date grid quick reference table

Obverse date grid	Die Marriage
M2, .025"	WB-42
M2.5, .034"	WB-43
M3, .025"	WB-20
M3, .025"	WB-21
M3, .025"	WB-4
M3, .026"	WB-22
M3, .028"	WB-30
M3.5, .022"	WB-5
M3.5, .026"	WB-32
M3.5, .028"	WB-33
M3.5, .029"	WB-11
M3.5, .030"	WB-2
M3.5, .031"	WB-8
M4, .024"	WB-28
M4, .025"	WB-38
M4, .026"	WB-40
M4, .028"	WB-1
M4, .028"	WB-14
M4, .028"	WB-27
M4, .028"	WB-34
M4, .029"	WB-17
M4, .031"	WB-13
M4, .032"	WB-6
M4.5, .025"	WB-41
M4.5, .026"	WB-15
M4.5, .026"	WB-16
M4.5, .028"	WB-12
M4.5, .028"	WB-25
M4.5, .028"	WB-35
M4.5, .030"	WB-39
M4.5, .030"	WB-7
M4.5, .032"	WB-26
M4.5, .034"	WB-3
M5, .023"	WB-37
M5, .024"	WB-36
M5, .030"	WB-31
M5.5, .023"	WB-24
M5.5, .028"	WB-9
R1, .025"	WB-19
R1, .029"	WB-18
R1, .031"	WB-10
R1.5, .020"	WB-23
R2, .030"	WB-29
112, 1000	1122 27

1876-S Obverse a Reverse d identificati keys	nd lie	Small lumps on the scroll	Diagonal die line in the lower horizontal shield	Die line in the eagle's upper left wing	Die lines in the eagle's feathers below the shield	Small lumps around the letters WE	Small lump in the upper horizontal shield lines	Small lump between the letters WE	Mintmark very high in the crotch
					Micro S	Mintma	rk		
Part 1		A	<b>B</b>	C	D	E	F	G	H
Small lumps in the rock above the date	1	WB-1					WB-7		
Small die line in the rock support below Liberty's foot	2		WB-2						
Die line in upper right shield	3			WB-3					
Recut 6, die polish lines thru the Liberty's lower gown and shield	4			WB-4					
Centered date with the 1 recut up	5				WB-5				
Center dot "hole" in Liberty's lap	6					WB-6	WB-8		
Cud along the outside upper right shield	7						WB-9		
Many lumps in Liberty's gown	8					WB-10			
Horizontal die line in the shield thru the scroll	9							WB-11	
Centered date	10								WB-12

(Continued on next table)

(Continued from previous table)

(Continued from pro	evious	s table)							
1876-S Obverse and Reverse die identification		Diagonal die line in the eagle's feathers by the left claw	Recut mintmark	Cracked die notably along the tops of letters AMERICA to arrow tips	Two lumps on the scroll between TRUST	Small lump inside the lower left shield	Mintmark high and below the feather tip	Large lump in the eagle's upper right wing	Lump in eagle's neck above right side of shield
keys Part 2		Micro S	Very small S	Micro S		Very s	mall S Mi	ntmark	
Tart 2		I	J	K	L	M	N	O	P
Curved lint mark on Liberty's left breast	11	WB-13	Economy agents agents						
Curved line in the rock support above the 8	12	WB-14							
Lumps in rock and rock support to left of shield and ribbon	13		WB-15	WB-16					
Centered date with a line in the rock support above the 7	14				WB-17				
Scattered lumps in Liberty's lap	15				WB-18				
Curved lines thru lower shield	16					WB-19			
Lump at the tip of the ribbon and inside the shield	17						WB-20	WB-21	WB-22
Bottom of the first 6 showing inside the circle of the final 6	18								WB-23

(Continued on next table)

(Continued from previous table)

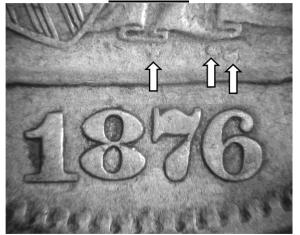
ntinued from previous	table)							
1876-S Obverse and Reverse die identification keys		Crud along serifs of mintmark	Small tines on the lower right outside edge of the letters (D)OL	Large rust lump along the scroll edge	Small lump in the eagle's right wing	Two parallel diagonal lines in the shield's upper right corner	Small lump in the lower left corner of the scroll end	Diagonal die line in the upper right corner of the eagle's left wing
Dont 2				Verv s	mall S mi	ntmark		
Part 3		Q	R	S	T	U	V	W
Small lump in the rock support above the 6	19	WB-24						
"Chin whiskers	20		WB-25					
Scattered lines and lumps in the recessed areas of the shield	21		WB-26					
"Smoking Liberty"	12		WB-27					
Lump in shield below (LIB)E(RTY)	22		WB-28					
Large lumps down the middle of Liberty's gown	23			WB-29				
Small lump below Liberty's heel	24			WB-30				
Large lump in Liberty's lap	25			WB-31				
Scattered small lumps in the horizontal shield lines	26				WB-32			
Horizontal line in the drapery	27					WB-33		
Large oblong- shaped lump in Liberty's gown to the left of the base of the pole	28						WB-34	
Three small lumps in Liberty's lap	29							WB-35

(Continued on next table)

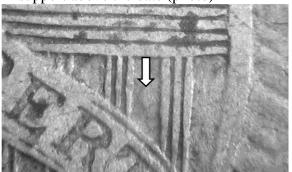
(Continued from p	reviou	us table)	T	T	1	T			1
1876-S Obverse and Reverse die identification		Parallel diagonal die lines in the eagle's neck feathers	Recut mintmark	Lump on olive stem end	Tine off the right of the lower serif of the (HAL)F	Heavy diagonal line in the recessed areas of the shield's vertical lines	Die lines in the recessed area between the upper olive leaf stems	Odd-shaped lump in the lower left shield; Mintmark recut	Mintmark not recut
keys				Type 1 re	verse hub			Tyl	pe 2
D 44				Ve	ery small S	S mintma	rk		
Part 4		X	Y	Z	AA	BB	CC	DD	EE
	8	5		S	<b>S</b>				
Small lump in (L)I(BERTY)	30	WB-36							
Curved line in the lower recessed area of the shield	31		WB-37						
Two small lumps on Liberty's gown	32			WB-38					
Scattered lumps near Liberty's gown hemline behind the foot	33				WB-39				
Scattered die lines to the right of Liberty's left wrist	34					WB-40			
Diagonal die line in the rock to the left of the shield	35						WB-41		
76 recut south	36							WB-42	
Small lump on left thigh	37								WB-43

### 1876-S WB-1, Micro S

### Obverse 1



 Date right with a small lumps in the rock support above the date (photo)



• Lump in the recessed area of the shield above the scroll and (LIBER)T(Y) (photo)

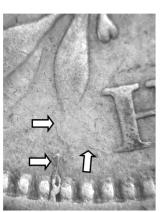


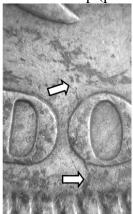
- File line in the rock support below Liberty's gown (photo)
- Clash lines across Liberty's lap



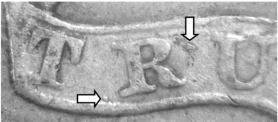


• Micro S mintmark below the feather tip (photo)





• Die crack from rim to olive leaf (above left photo) and from rim thru (D)O(L) (above right photo)



- Small lumps on the scroll around the (T)R(UST) (photo)
- Transitional die also used with the rare 1875-S micro S mintmark variety
- Weak tail feathers below shield
- Weak olive leaf tips
- Clash in lower right shield

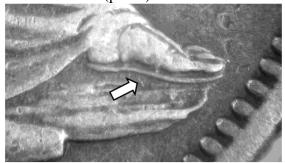
Date grid: M4, .028"	148 reeds		Гуріcal diameter = 1.208"	Rarity - 3
Drapery die state: Partial	Orapery die state: Partial Foot support: Weak		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45		Coin from the Bill Bugert Co	llection	
Cross reference: WB-101.				Version 2.34

### 1876-S WB-2, Micro S

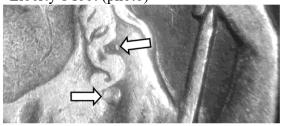
Obverse 2



Centered date (photo)



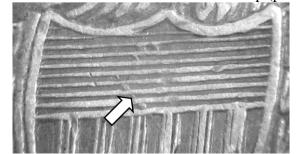
• Small die line in the rock support below Liberty's foot (photo)



- Small lumps around the ends of Liberty's hair curls (photo)
- Unfinished under Liberty's chin
- Recut stars 2, 3, 6, and 10



• Micro S mintmark below the feather tip (photo)



- Diagonal (NW to SE) die line in the lower horizontal shield lines (photo)
- Weak tail feathers below shield

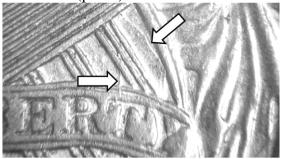
Date grid: M3.5, .030"	148 reeds		Typical diameter = 1.209" Rarity - 4	
Drapery die state: Full Foot support: Strong		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU50			Coin from the Randy Wiley Collection	
Cross reference: WB-101.			Version 2.34	

### 1876-S WB-3, Micro S

Obverse 3



• Date low (photo)



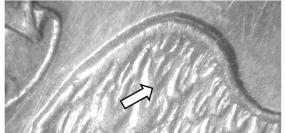
• Die line from the (LIBER)T(Y) thru the scroll edge into the upper right shield and wavy die line in the upper right shield's recessed area (photo)



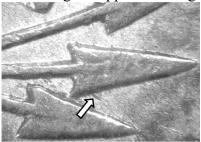
- Clash lines across Liberty's lap and below Liberty's elbow (photo)
- Recut star 11



• Micro S mintmark below the feather tip (photo)



• Die line in the eagle's upper left wing (photo)



- Small tine off the lower edge of the middle arrow head (photo)
- Weak tail feathers below shield

This is the first use of this reverse die.

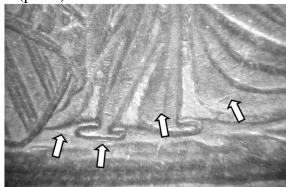
1110 10 4110 11100 4000 01 41110 1000 4100				
Date grid: M4.5, .034"	148 reeds		Typical diameter = 1.212" Rarity - 4	
Drapery die state: Partial	pery die state: Partial Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU58			Coin from the Randy Wiley Collection	
Cross reference: WB-101.			Version 2	2.34

### 1876-S WB-4, Recut 6, Micro S

Obverse 4



• Date left with the 6 slightly recut up (photo)

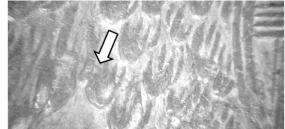


- Circular die polish lines thru the Liberty's lower gown and shield (photo)
- Unfinished below Liberty's chin

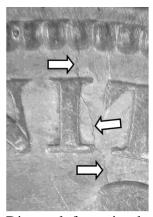


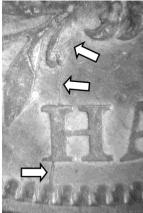


• Micro S mintmark below the feather tip (photo)



• File line in left wing (photo)



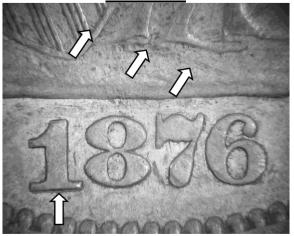


- Die crack from rim thru (UN)I(TED) to the scroll (above left photo)
- Die crack from the rim thru the left side of H(ALF) thru the lower olive berry (above right photo)
- Weak tail feathers below shield

This is the second use of this reverse die.				
Date grid: M3, .025"	148 r	reeds	Typical diameter = 1.211"	Rarity - 4
Drapery die state: Full Foot support: Strong		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU50			Coin from the Randy Wiley (	Collection
Cross reference: WB-101.				Version 2.34

### 1876-S WB-5, Micro S

Obverse 5



 Date high with the 1 recut up; diagonal (NW to SE) lines thru the lower right shield, gown, and the rock support above 876 (photo)

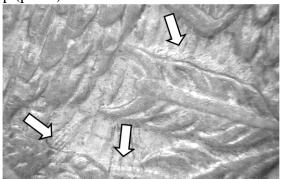


- Small lump at the tip of Liberty's left index finger (photo)
- Unfinished below Liberty's chin
- Recut stars 3, 4, and 11-13

Reverse D



• Micro S mintmark in the field below the feather tip (photo)



- Scattered die lines in the eagle's feathers below the shield and below the upper arrow feathers (photo)
- Weak tail feathers below shield
- Weak olive leaf tips

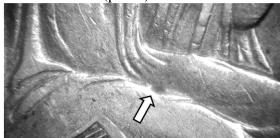
Treedt Stars 3, 1, and 1	1 13				
Date grid: M3.5, .022"	148 reeds			Typical diameter = 1.208"	Rarity - 4
Drapery die state: Full Foot support: S		Strong	Dentils: Obverse - Full; Rev	erse - Full	
Grade of coin depicted: AU50			Coin from the Bill Bugert Co	llection	
Cross reference: WB-101.					Version 2.34

### 1876-S WB-6, Micro S

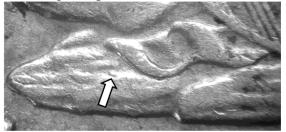
Obverse 6



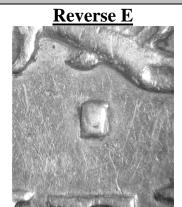
• Centered date (photo)



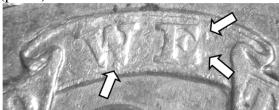
• Center dot "hole" in Liberty's lap from the reverse image of a compass point in the working die (photo)



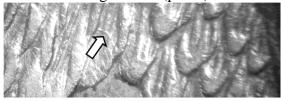
• Small lump in the rock support near the end of the ribbon (photo)



 Blob-like micro S mintmark in the field between the feather tip and the top of (HAL)F (photo)



 Small lumps around the letters WE on the scroll simulating a colon (photo)



• Arching line in the eagle's left wing (photo)

This is the first use of this	obverse die and the first use	of this reverse die.
Date grid: M4 032"	148 reeds	Typical diameter =

Date grid: M4, .032"	032" 148 reeds		]	Typical diameter = 1.210"	Rarity - 4
Drapery die state: Full		Foot support: Strong		Dentils: Obverse - Full; Reve	erse - Full
Grade of coin depicted: XF40				Coin from the Randy Wiley C	Collection
Cross reference: WB-101.					Version 2.34

### 1876-S WB-7, Micro S

Obverse 1



• Date right with a small lumps in the rock support above the date (photo)



• Lump in the recessed area of the shield above the scroll and (LIBER)T(Y) (photo)

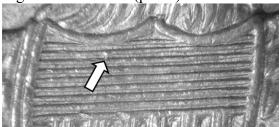


- File line in rock support below Liberty's gown (photo)
- Clash lines across Liberty's lap

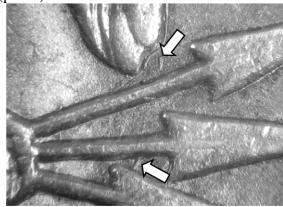




• Micro S mintmark centered in the field between the feather tip and the top of (HAL)F; die lines in eagle's middle claw (photo)



• Small lump in the upper horizontal shield lines (photo)



- Small lines between the arrow shafts (photo)
- Weak tail feathers below shield and olive leaf tips

This is the second use of this obverse die and the first use of this reverse die.

Date grid: M4.5, .030" | 147 reeds | Typical diameter = 1.207" | Rarity - 3

Drapery die state: Partial | Foot support: Weak | Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: AU58 | Coin from the Randy Wiley Collection

Cross reference: WB-101. | Version 2.34

### 1876-S WB-8, Micro S

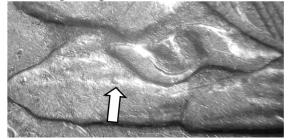
Obverse 6



• Centered date (photo)



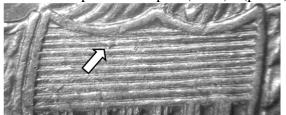
• Center dot "hole" in Liberty's lap from the reverse image of a compass point in the working die (photo)



• Small lump in the rock support near the end of the ribbon (photo)



• Micro S mintmark centered in the field between the feather tip and the top of (HAL)F (photo)



• Small lump in the upper horizontal shield lines (photo)



 Vertical line in the back of the eagle's mouth (photo)

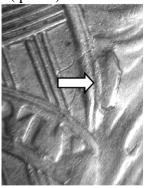
This is the second use of this obverse die and the second use of this reverse die.			
Date grid: M3.5, .031" 147 1	reeds	Typical diameter = 1.204"	Rarity - 3
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU50		Coin from the Bill Bugert Co	llection
Cross reference: WB-101.			Version 2.34

### 1876-S WB-9, Micro S

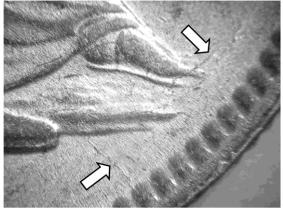
Obverse 7



• Date right( photo)



 Huge lump along the outside upper right shield line in Liberty's gown (photo)

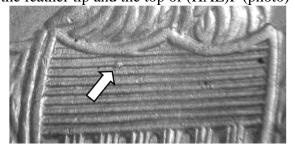


- LDS: die crack along the foot support and foot to dentil at K-5 (photo)
- Clash in drapery below Liberty's elbow

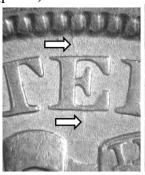


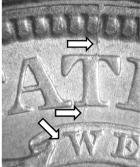


• Micro S mintmark centered in the field between the feather tip and the top of (HAL)F (photo)



• Small lump in the upper horizontal shield lines (photo)





- LDS: cracked die: from dentil thru (UNIT)E(D) into field (above left photo), from dentil thru (STA)T(ES) into scroll (above right photo), thru olive leaves, and along tops of AMERICA
- Vertical line in the back of the eagle's mouth
- Weak tail feathers below shield
- Weak olive leaf tips

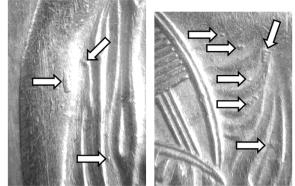
This is the third use of this reverse die.					
Date grid: M5.5, .028"   147 reeds			-	Гуріcal diameter = 1.208"	Rarity - 3
Drapery die state: Partial Foot support: Strong				Dentils: Obverse - Full; Reve	erse - Full
Grade of coin depicted: MS62				Coin from the Randy Wiley C	Collection
Cross reference: WB-101.					Version 2.34

### 1876-S WB-10, Micro S

Obverse 8



• Date far right (photo)

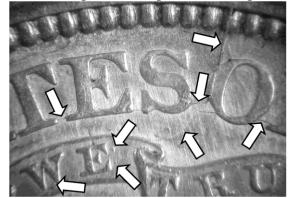


- Many lumps in Liberty's gown; on and adjacent to Liberty's left arm (above left photo) and to the right of the shield (above right photo)
- Die line from the dentils below 76





• Blob-like micro S mintmark in the field between the feather tip and the top of (HAL)F (photo)



• Small lumps around the letters WE on the scroll; die cracks from rim thru O(F) into field (photo) and along base of STATES OF A(MERICA)



- Arching line in the eagle's left wing (photo)
- Weak tail feathers below shield

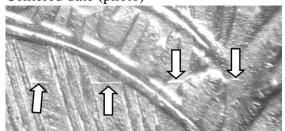
This is the second use of this reverse die. This variety has proof-like surfaces.				
Date grid: R1, .031"	' 147 reeds		Typical diameter = 1.212"	Rarity - 4
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58			Coin from the Randy Wiley (	Collection
Cross reference: WB-101.				Version 2.34

### 1876-S WB-11, Micro S

Obverse 9



Centered date (photo)



 Horizontal die line in the shield thru the scroll at (LIBERT)Y (photo)

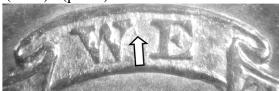


- Diagonal die lines in the rock support below Liberty's foot (photo)
- Rusty die on Liberty's gown
- Recut stars 2, 3, 6, and 10

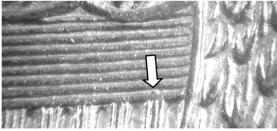
Reverse G



 Micro S mintmark centered in the field between the feather tip and the top of (HAL)F (photo)



• Small lump between the letters WE in the motto (photo)



- Small lump between lower two shield lines above vertical shield line F2 (photo)
- Some faint die polish lines around the eagle's claws and to the left of the arrow feathers

Date grid: M3.5, .029"	147 reeds		Typical diameter = 1.206" Rarity - 4	ŀ
Drapery die state: Full	Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS64			Coin from the Randy Wiley Collection	
Cross reference: WB-101.		Version	2.34	

### 1876-S WB-12, High Micro S

Obverse 10

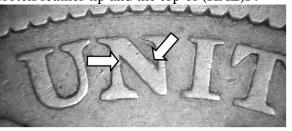


• Centered date (photo)

Reverse H



• Micro S mintmark very high in the crotch and tilted slightly to the left (photo); this is the only 1876-S micro S mintmarked die with a very high mintmark position; all others have a mintmark lower and centered in the field below the crotch/feather tip and the top of (HAL)F.



• Reworked (U)N(ITED) (photo). The N appears to have been re-engraved or touched up.

Other die diagnostics will have to await discovery of a higher grade coin of this variety. Others surely exist but Randy and I have not been able to find another example of this die marriage.

Date grid: M4.5, .028"	147 reeds		Typical diameter = 1.203" Rarity - 7
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full
Grade of coin depicted: G6			Coin from the Bill Bugert Collection
Cross reference: WB-101.			Version 2.3

### 1876-S WB-13, Micro S

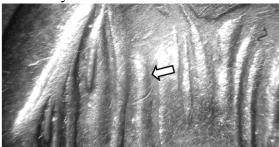
**Obverse 11** 



Centered date (photo)



Rust lumps on Liberty's neck area (photo). These lumps will appear on very high grade coins only.



- Curved lint mark on Liberty's left breast (photo). This lint mark will appear on high grade coins only.
- Die crack from star 4 thru stars 5-7, Liberty's head, star 8, to the cap and thru stars 9-11
- Scattered faint arching die lines in the recessed areas of the lower shield
- Light clash lines across Liberty's lap

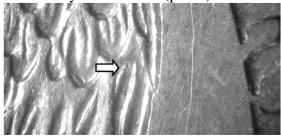
Reverse I



Micro S mintmark below the feather tip/crotch (photo)



Diagonal (NE to SW) die line in the eagle's feathers by the left claw (photo)



- Rust lump on the eagle's right wing adjacent to the letters (AME)RI(CA) (photo)
- Weak upper left wing feathers

This is the first use of this reverse die

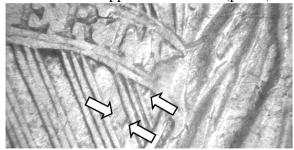
This is the first use of this reverse the.					
Date grid: M4, .031"	147 reeds		Typical diameter = 1.207"	Rarity - 4	
Drapery die state: None	die state: None Foot support: Weak		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU55		Coin from the Dick Osburn O	Collection		
Cross reference: WB-101.				Version 2.34	

### 1876-S WB-14, "Smoking Liberty," Micro S

**Obverse 12** 



• Date right with a curved line (lint mark?) in the rock support above the 8 (photo)

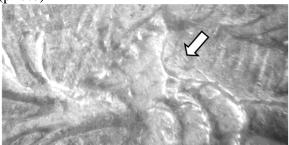


- Heavy diagonal (SW to NW) line in the lower right obverse shield (photo)
- Horizontal die line thru Liberty's left fingers as if she was holding a cigarette (see WB-27)

Reverse I



Micro S mintmark below the feather tip/crotch (photo)



• Diagonal (NE to SW) die line in the eagle's feathers by the left claw (photo)



- Die crack thru HALF D to rim below D)(L) (photo)
- Diagonal die lines in the feathers between the shield tip and upper arrow feathers

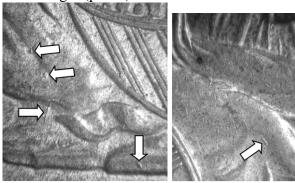
This is the first use of this obverse die and the second use of this reverse die.					
Date grid: M4, .028"				Typical diameter = Jnknown"	Rarity - 4
Drapery die state: Partial Foot support: Weak				Dentils: Obverse - Full; Rev	erse - Full
Grade of coin depicted: ANACS AU50				Coin from the Scott Mickelso	on Collection
Cross reference: WB-101.					Version 2.34

## 1876-S WB-15, Very small Recut S

### Obverse 13



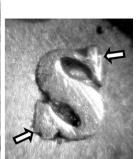
• Date right (photo)



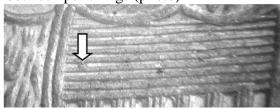
- Lumps in rock and rock support to left of shield and ribbon (above left photo)
- Lump under Liberty's left knee (above right photo)

### **Reverse J**

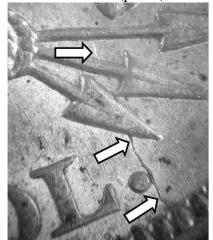




 Very small recut S mintmark; slightly rotated between punchings (photo)



EDS: lump in horizontal shield lines above vertical shield line A1 (photo)



- Die crack from rim along (DOL). into the lower arrow head to the shafts of the upper two arrows (photo)
- Weak tail feathers below shield
- Weak olive leaf tips

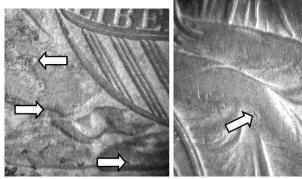
This is the first use of this obverse die.					
Date grid: M4.5, .026"	.026" 149 reeds		Typical diameter = 1.220"	Rarity - 4	
Drapery die state: Full to partial (LDS)  Foot support: Strong		Dentils: Obverse - Full; Rev	erse - Full		
Grade of coin depicted: MS62			Coin from the Randy Wiley	Collection	
Cross reference: WB-102.				Version 2.34	

### 1876-S WB-16, Micro S

Obverse 13



• Date right (photo)



- Lumps in rock and rock support to left of shield and ribbon (above left photo)
- Lump under Liberty's left knee (above right photo)





 Micro S mintmark low, slightly left of the feather tip, and leaning slightly to the right (photo)



- Cracked die notably along the tops of letters AMERICA to arrow tips (photo) and along base of HALF
- Weak olive leaf tips
- Bottoms of C1-3 weak
- Weak tail feathers below shield

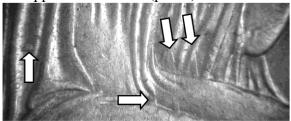
Prioto)			
This is the second use of	this obverse die.		
Date grid: M4.5, .026"	149 reeds	Typical diameter = 1.220"	Rarity - 3
Drapery die state: Partial	Foot support: Strong to weak (LDS)	Dentils: Obverse - Full; Re	verse - Full
Grade of coin depicted: N	MS61	Coin from the Randy Wiley	Collection
Cross reference: WB-101			Version 2.34

### 1876-S WB-17, Very small Recut S

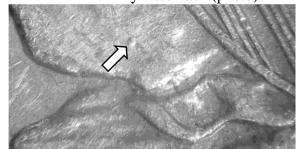
Obverse 14



• Centered date with a line in the rock support above the 7 (photo)



• Clash lines in Liberty's lap and a lump to the left of Liberty's stomach (photo)

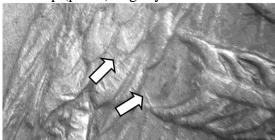


- Small lump on the rock above the tip of the ribbon (photo)
- Small lump in the gown behind Liberty's heel
- LDS: die crack off left end of rock support to dentils halfway to star 1. Another die crack connects stars 10-13 with Liberty's toes

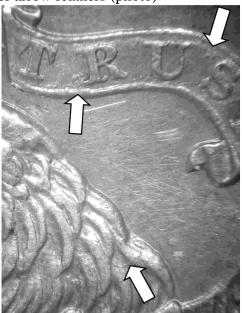
**Reverse** L



• Very small S mintmark high and below the feather tip (photo) slightly recut east



• Arching die line on the eagle's left leg behind the upper arrow feathers (photo)



Two lumps on the scroll between TRUST and a hook shaped line on the eagle's neck (photo)

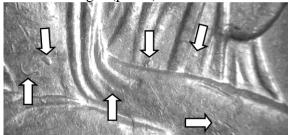
This is the first use of this reverse die.					
Date grid: M4, .029" 150 reeds			Typical diameter = 1.220"	Rarity - 3	
Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Rev	erse - Full	
Grade of coin depicted: AU50			Coin from the Bill Bugert Co	llection	
Cross reference: WB-102.				Version 2.34	

### 1876-S WB-18, Very small Recut S

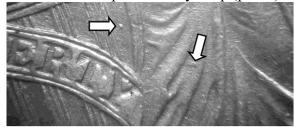
**Obverse 15** 



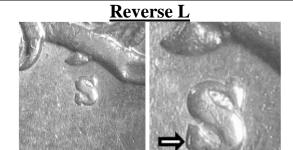
Date far right (photo)



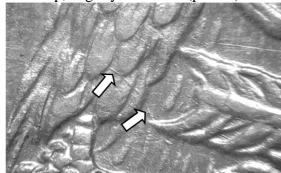
• Scattered lumps in Liberty's lap (photo)



- Small lumps in the upper right shield and in Liberty's gown to the right of the shield (photo)
- High grade only: large lump on Liberty's left triceps
- Unfinished under Liberty's chin
- Recut stars 3, 4, and 11-13



• Very small S mintmark high and below the feather tip, slightly recut east (photos)



Arching die line on the eagle's left leg behind the upper arrow feathers (photo)



• Two lumps on the scroll between TRUST and a hook shaped line on the eagle's neck (photo)

This is the second use of this reverse die.

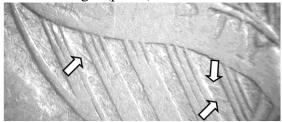
Date grid: R1, .029"	150 reeds		Typical diameter = 1.198" Rarity - 4
Drapery die state: Partial		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full
Grade of coin depicted: MS61			Coin from the Randy Wiley Collection
Cross reference: WB-102.			Version 2.34

## 1876-S WB-19, Very small S

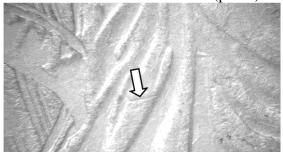
### Obverse 16



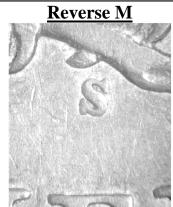
• Date far right (photo)



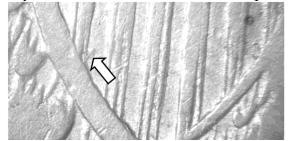
• Curved lines thru lower shield (photo)



- Curved line in Liberty's gown to the right of the scroll (photo)
- Light clash lines across Liberty's lap



• Very small S left and below the crotch (photo)



- Small lump inside the lower left shield (photo)
- Weak olive leaf tips
- Weak tail feathers below shield

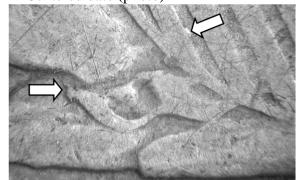
Date grid: R1, .025"	150 reeds		Typical diameter = 1.218" Rarity - 4	
Drapery die state: Partial	tial Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: F12			Coin from the Dick Osburn Collection	
Cross reference: WB-102.			Version 2.34	

### 1876-S WB-20, Very small S

Obverse 17



• Centered date (photo)



• Lump at the tip of the ribbon and inside the shield (photo)

Reverse N

- Very small S mintmark high and below the feather tip (photo). This coin's grade is too low for good diagnostics but the mintmark is much higher than the other two reverse dies used with this obverse die.
- Weak tail feathers below shield

This is the first use of this obverse die.

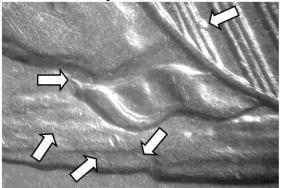
Date grid: M3, .025"	147 reeds		Typical diameter = 1.202" Rarity - 4	
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: VG10		Coin from the Randy Wiley Collection		
Cross reference: WB-102.			Version 2	2.34

### 1876-S WB-21, Very small S

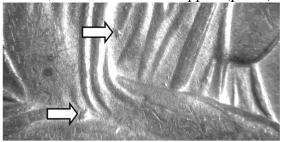
Obverse 17



• Centered date (photo)



• Lump at the tip of the ribbon and inside the shield; die cracks in rock support (photo)

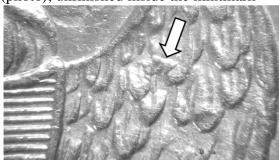


- Small lumps in Liberty's lap and in the gown to right of Liberty's stomach (photo)
- Weak diagonal die crack from toe to K-4

**Reverse O** 



• Very small S mintmark below the feather tip (photo); unfinished inside the mintmark



- Large lump in the eagle's upper right wing almost hidden by the feathers (photo)
- Weak tail feathers below shield
- LDS: weak die crack along tops of letters (AME)RIC(A)

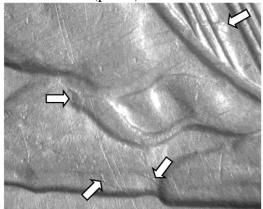
Ç					
This is the second use of this obverse die.					
Date grid: M3, .025"	141 ı	reeds	Typical diameter = 1.204"	Rarity - 4	
Drapery die state: Partial Foot support: Full			Dentils: Obverse - Full; Rev	erse - Full	
Grade of coin depicted: AU55			Coin from the Randy Wiley	Collection	
Cross reference: WB-102.				Version 2.34	

### 1876-S WB-22, Very small S

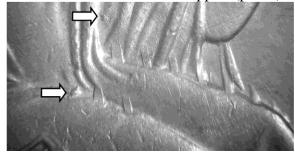
Obverse 17



• Centered date (photo)



• Lump at the tip of the ribbon and inside the shield; die cracks in rock support (photo)

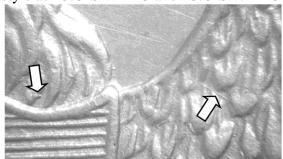


- Small lumps and clash lines in Liberty's lap and in the gown to right of Liberty's stomach (photo)
- Die crack diagonally from toe to K-4

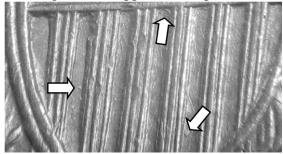




 Very small S mintmark below the feather tip (photo); finished inside the mintmark - same style as 1875-S WB-13 and 1875-S WB-16



• Lump in eagle's neck above right side of shield and diagonal die line in the eagle's right wing to the right of the upper shield (photo)



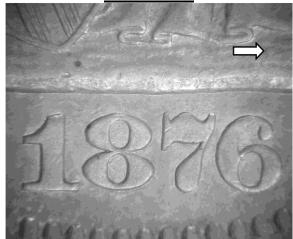
- Scattered lumps in the recessed area of the shield between the vertical lines (photo)
- Reverse die transitional with 1877-S

This is the third use of this obverse die and the first use of this reverse die.					
Date grid: M3, .026"	147 ı	eeds	Typical diameter = 1.204"	Rarity - 4	
Drapery die state: Partial Foot support: Weak			Dentils: Obverse - Full; Rev	erse - Full	
Grade of coin depicted: AU55			Coin from the Randy Wiley	Collection	
Cross reference: WB-102.				Version 2.34	

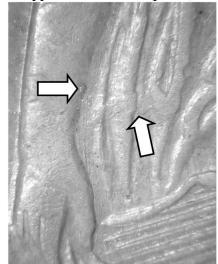
1876-S						
WB-23, Recu	WB-23, Recut 6, Very small S					
Obverse 18		Reverse P				
Photos Not Available	Photos Not Available					
<ul> <li>Date far right with the bottom of the first 6 showing inside the circle of the final 6</li> <li>File line from bottom of the 8 to a position below the base of the 1</li> </ul>	Very small S mintmark below the crotch and tilted to the right					
For photographs and complete information on the discovery of this variety by Mike Stettenbenz, see <i>Gobrecht Journal</i> issue #89, pages 27-29.  This is the second use of this reverse die.						
Date grid: R1.5, .020" 148 reeds		Typical diameter = Unknown Rarity - 4				
Drapery die state: Partial Foot support: S		Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: AU53	Coin	from the Mike Stettenbenz Collection				
Cross reference: WB-102.		Version 2.34				

### 1876-S WB-24, Very small S

Obverse 19



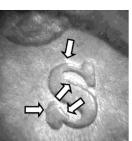
• Date far right with a small lump in the rock support above the 6 (photo)



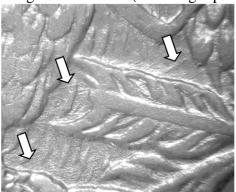
- Small lump on the inside of Liberty's left wrist and another larger lump in the gown to the right of Liberty's wrist (photo)
- Two small lumps to the upper left of the drapery
- Diagonal line below Liberty's right knee

**Reverse Q** 

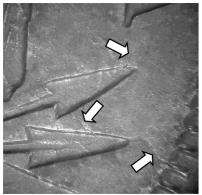




• Very small S mintmark below the crotch and tilted to the right (above left photo); crud along upper edges of the serifs (above right photo)



 Scattered die lines in the eagle's feathers below the shield and below the upper arrow feathers (photo)



- Die crack from rim thru upper two arrow heads (photo)
- Rusty die with much of the eagle's wing feathers polished away

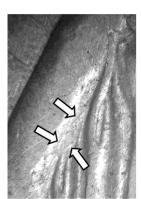
Date grid: M5.5, .023"	148 reeds		Typical diameter = 1.210" Rarity - 4	
Drapery die state: Full	tate: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection	
Cross reference: WB-102.			Version 2.34	

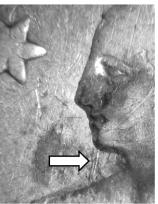
### 1876-S WB-25, Very small S

Obverse 20



• Date right (photo)



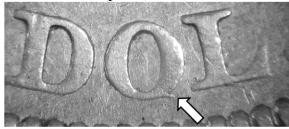


- Scattered lines to the right of Liberty's right upper arm (above left photo)
- Lines below Liberty's chin appearing as "Chin whiskers" (above right photo)

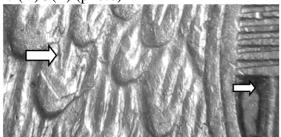
**Reverse R** 



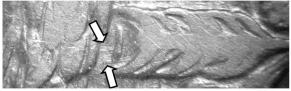
• Very small S mintmark below the crotch and tilted to the left (photo)



• Small lump on the lower right outside edge of the (D)O(L) (photo)



• Small lump in the eagle's left wing and in the upper left shield recessed area (photo)



Die lines and small lump to the left of the upper arrow feathers (photo)

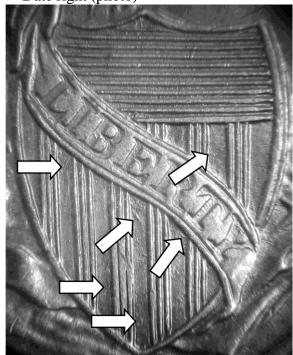
This is the second use of this reverse die.						
Date grid: M4.5, .028"	148 r	reeds	Typical diameter = 1.202"	Rarity - 3		
Drapery die state: Full Foot suppor		Foot support: Strong	Dentils: Obverse - Full; Rev	erse - Full		
Grade of coin depicted: VF30			Coin from the Bill Bugert Co	ollection		
Cross reference: WB-102.				Version 2.34		

### 1876-S WB-26, Very small S

Obverse 21



Date right (photo)

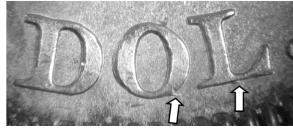


- Scattered lines and lumps in the recessed areas of the shield (photo)
- Unfinished below Liberty's chin
- Clash lines across Liberty's lap and under the drapery

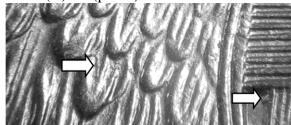




Very small S mintmark below the crotch and tilted to the left (photo); mintmark unfinished inside



Small tines on the lower right outside edge of the letters (D)OL (photo)



Small lump in the eagle's left wing and in the upper left shield recessed area (photo)



Die lines and small lump to the left of the upper arrow feathers (photo)

This is the first use of this reverse die.						
Date grid: M4.5, .032"	148 r	148 reeds		Typical diameter = 1.213"	Rarity - 4	
Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: MS62				Coin from the Randy Wiley O	Collection	
Cross reference: WB-102.					Version 2.34	

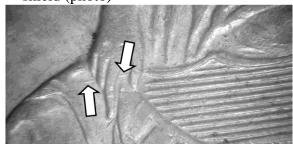
### 1876-S

# WB-27, "Smoking Liberty," Very small S

**Obverse 12** 



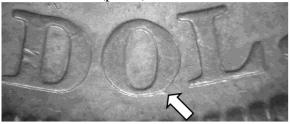
• Centered date with an arching line in the rock support above the 8 and a diagonal line in the recessed area of the lower right shield (photo)



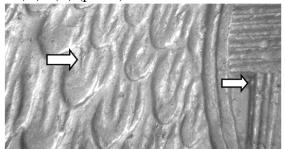
 Horizontal die line thru the Liberty's left fingers as if she was holding a cigarette (photo) Reverse R



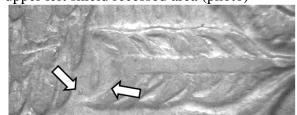
• Very small S mintmark below the crotch and tilted to the left (photo)



• Small lump on the lower right outside edge of the (D)O(L) (photo)



Small lump in the eagle's left wing and in the upper left shield recessed area (photo)



- Die lines and small lump to the left of the upper arrow feathers (photo)
- Weak tail feathers below shield

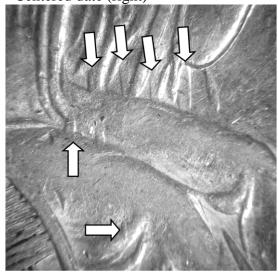
This is the second use of this obverse die and third use of this reverse die.					
Date grid: M4, .028"	147 r	reeds	Typical diameter = 1.205"	Rarity - 4	
Drapery die state: Full Foot support: Weak		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF45			Coin from the Randy Wiley	Collection	
Cross reference: WB-102.				Version 2.34	

### 1876-S WB-28, Very small S

Obverse 22



Centered date (right)



 Clash lines across Liberty's lap and a small lump in the gown to the right of the upper shield (photo)



• Lump in shield below (LIB)E(RTY) (photo)

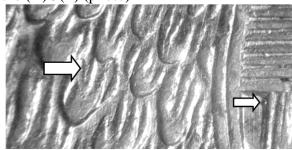




 Very small S mintmark below the crotch and tilted to the left (photo)



 Small lump on the lower right outside edge of the (D)O(L) (photo)



Small lump in the eagle's left wing and in the upper left shield recessed area (photo)



- Die lines and small lump to the left of the upper arrow feathers (photo)
- Weak tail feathers below shield

This is the fourth use of this reverse die.

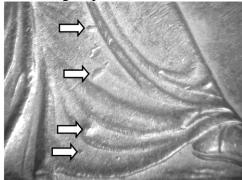
Date grid: M4, .024"	147 r	147 reeds		Typical diameter = 1.203"	Rarity - 3
Drapery die state: Partial Foot support: Weak			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU50				Coin from the Bill Bugert Co	llection
Cross reference: WB-102.					Version 2.34

### 1876-S WB-29, Very small S

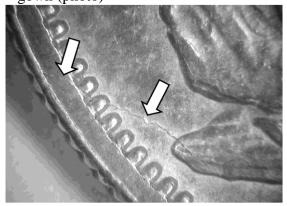
Obverse 23



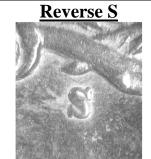
• Date far right (photo)



• Large lumps down the middle of Liberty's gown (photo)



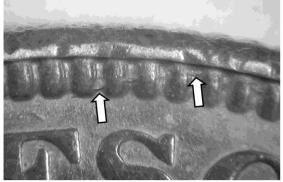
• Die crack from the rim left of the rock to the left edge of the rock support (photo)



• Very small S mintmark tilting slightly to the right (photo)



 Large rust lump along the scroll edge above (I)N and below (UNITE)D (photo)



• Line in dentils above (STAT)ES O(F) (photo)

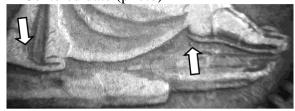
This is the first use of this reverse die						
Date grid: R2, .030"	147 r	reeds	Typical diameter = 1.210"	Rarity - 3		
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: MS61			Coin from the Bill Bugert Co	ollection		
Cross reference: WB-102.				Version 2.34		

### 1876-S WB-30, Very small S

**Obverse 24** 



Centered date (photo)

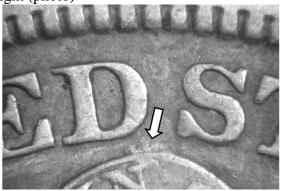


- Small arching line in the lower gown and a small lump below Liberty's heel (photo)
- Other scattered lumps throughout Liberty's gown behind foot and to right of the scroll

**Reverse S** 



• Very small S mintmark tilting slightly to the right (photo)



Large rust lump along the scroll edge above (I)N and below (UNITE)D (photo)



- Die crack from the dentil thru the upper left serif of the (STA)T(ES) and from the dentil thru the upper right serif of the (STAT)E(S) (photo)
- Weak tail feathers below shield

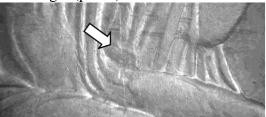
This is the second use of this reverse die.						
Date grid: M3, .028"	147 r	reeds	Typical diameter = 1.211"	Rarity - 3		
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: XF40			Coin from the Bill Bugert Co	ollection		
Cross reference: WB-102.				Version 2.34		

### 1876-S WB-31, Very small S

Obverse 25

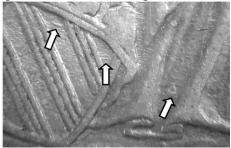


• Date right (photo)



• Large lump in Liberty's lap (photo)

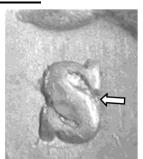
 Die lines from the rock thru the left shield edge below LIBERTY (photo)



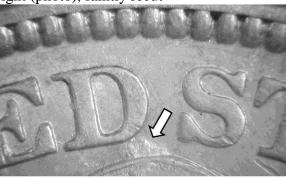
• Die lines in the shield below (LIBER)TY and a lump in the gown to the right of the shield (photo)

Reverse S

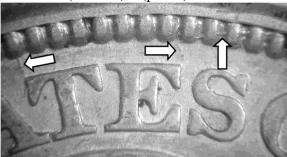




• Very small S mintmark tilting slightly to the right (photo), faintly recut



 Large rust lump along the scroll edge above (I)N and below (UNITE)D (photo)



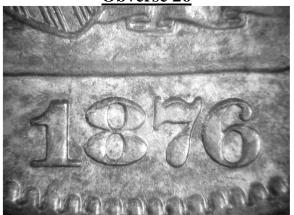
- Die crack from the dentil thru the upper left serif
  of the (STA)T(ES) and from the dentil thru the
  upper right serif of the (STAT)E(S); line in
  dentils above (STAT)ES (photo)
- Weak tail feathers below shield

This is the third use of this reverse die.

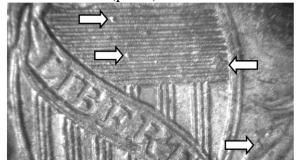
Date grid: M5, .030"	147 r	reeds	Typical diameter = 1.212" Rarity - 3		
Drapery die state: Full Foot support: Strong		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU50			Coin from the Randy Wiley Collection		
Cross reference: WB-102.			Version 2.34		

## 1876-S WB-32, Very small S

Obverse 26



• Centered date (photo)

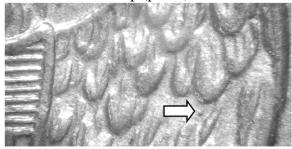


• Scattered small lumps in the horizontal shield lines and in Liberty's gown to the right of the shield (photo)

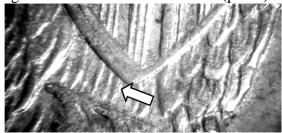




 Very small S mintmark high and centered below the feather tip (photo)



• Small lump in the eagle's right wing to the right of the horizontal shield lines (photo)

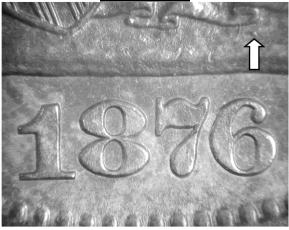


• Short line from the bottom of vertical shield line C1 to the arrow feathers (photo)

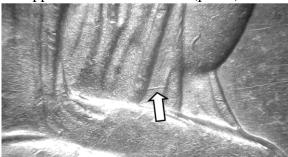
Date grid: M3.5, .026"	147 reeds		T	ypical diameter = 1.202"	Rarity - 4
Drapery die state: Full	Orapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU58				Coin from the Randy Wiley (	Collection
Cross reference: WB-102.					Version 2.34

### 1876-S WB-33, Very small S

**Obverse 27** 



Centered date with lump in the rock support below the hemline (photo)

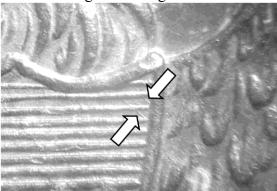


- Horizontal die line in the drapery to the right of the base of the pole (photo)
- Weak die crack thru Liberty's toes





Very small S mintmark below the feather tip (photo). With 30 power magnification, this mintmark's slight recutting is visible.



Two parallel diagonal lines in the shield's upper right corner (photo)



- Small lump between TR(UST) (photo) and another inside the (G)O(D)
- Weak olive leaf tips
- Weak tail feathers below shield

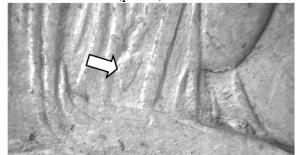
Date grid: M3.5, .028"	147 reeds		]	Typical diameter = 1.206"	Rarity - 4
Drapery die state: Partial Foot support: Weak			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS63				Coin from the Randy Wiley (	Collection
Cross reference: WB-102.					Version 2.34

### 1876-S WB-34, Very small S

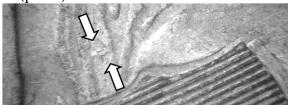
**Obverse 28** 



• Centered date (photo)



 Large oblong-shaped lump in Liberty's gown to the left of the base of the pole (photo)



• Two small lumps in Liberty's gown above the shield and to the right of Liberty's left wrist (photo)





Very small S mintmark below the feather tip (photo)



Faint die line from the upper right serif of the (STAT)E(S) towards the dentils (photo)



- Small lump in the lower left corner of the scroll end and another along the upper scroll edge near IN (photo)
- Faint lump in the recessed area of the upper right horizontal lines of the shield
- Weak tail feathers below shield

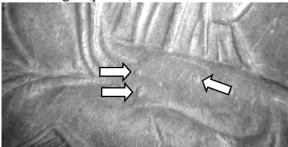
Date grid: M4, .028"	147 reeds	Typical diameter = 1.200"	Rarity - 3
Drapery die state: Full	Foot support: Weak to strong	Dentils: Obverse - Full; Rev	erse - Full
Grade of coin depicted:	XF45	Coin from the Bill Bugert Co	ollection
Cross reference: WB-102	2.		Version 2.34

## 1876-S WB-35, Very small S

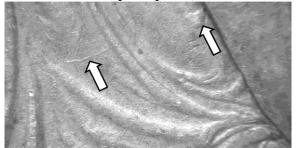
#### Obverse 29



Date right (photo)



• Three small lumps in Liberty's lap below the base of the pole (photo)

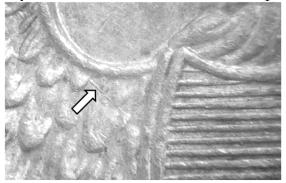


 Wavy die line in gown to the left of Liberty's shin and large lump on Liberty's right shin (photo)

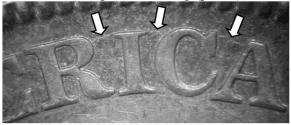




• Very small S mintmark below the crotch (photo)



Diagonal (NW to SE) die line in the upper right corner of the eagle's left wing (photo)



- Die crack along the tops of letters (AME)RICA (photo) and along top of letters UNI(TED)
- Weak tail feathers below shield
- Weak bottoms of shield lines C1-3

Date grid: M4.5, .028"   147	reeds	Typical diameter = 1.204"	Rarity - 3
Drapery die state: Partial Foot support: Weak		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU55		Coin from the Randy Wiley	Collection
Cross reference: WB-102.			Version 2.34

### 1876-S WB-36, Very small S

Obverse 30



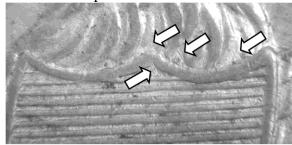
• Date right (photo)

- Small lump in (L)I(BERTY), in the upper right shield below the lowest horizontal shield line, and outside the shield slightly below the lowest horizontal shield line (photo)
- Unfinished under Liberty's chin





• Very small S mintmark under the crotch with a lump on the olive stem's end (photo) similar to WB-38. With 30 power magnification, this mintmark's slight recutting is visible on the notch in the top serif.



- Parallel diagonal die lines in the eagle's neck feathers and in the upper right shield (photo)
- Faint die crack along the top of (TRU)ST
- Weak tail feathers below shield
- Clash line thru olive leaf 5 to the eagle's wing

Date grid: M5, .024"	147 reeds		Typical diameter = 1.211" Rarity - 3	
Drapery die state: Full Foot support: Strong		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU55			Coin from the Randy Wiley Collection	
Cross reference: WB-102.			Version 2.34	

## 1876-S WB-37, Very small Recut S

Obverse 31



- Date right with a curved line in the lower recessed area of the shield (photo)
- Unfinished under chin
- Recut stars 4, 5, and 10-13

Reverse Y





 Very small S mintmark centered below the crotch and either recut up or recut over a micro S mintmark (photo)



- LDS: die crack from the dentil above to the (AMER)I(CA) into field (photo) and along the tops of CA towards arrow head
- Weak tail feathers below shield

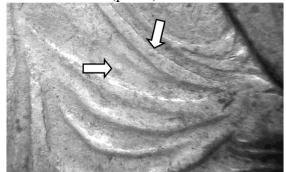
Date grid: M5, .023"	147 reeds	Typical diameter = 1.202"	Rarity - 3			
Drapery die state: Partial	Foot support: Weak	Dentils: Obverse - Full; Reverse - Full				
Grade of coins depicted:	AU53		EDS: Coin from the Bill Bugert Collection LDS: Coin from the Randy Wiley Collection			
Cross reference: WB-102	2.		Version 2.34			

## 1876-S WB-38, Very small S

Obverse 32



• Date centered (photo)

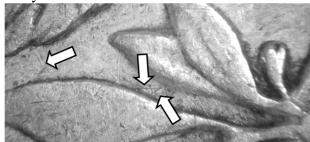


- Two small lumps on Liberty's gown to the left of Liberty's right shin (photo)
- Unfinished under Liberty's chin
- Recut stars 3, 4, and 7

**Reverse Z** 



 Very small S mintmark high and centered below the crotch; lump on the olive stem end (photo) is very similar to WB-36



- Die lines between the olive leaves and the left wing (photo)
- Weak tail feathers below shield
- Weak olive leaf tips

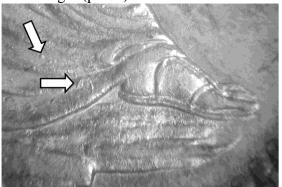
Date grid: M4, .025"	147 reeds		Typical diameter = 1.208" Rarity - 3			
Drapery die state: Full		Foot support: Weak	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: X	XF40		Coin from the Bill Bugert Collection			
Cross reference: WB-102	2.		Version 2.34			

## 1876-S WB-39, Very small S

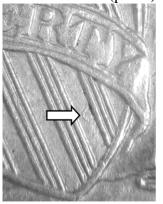
Obverse 33



• Date right (photo)



• Scattered lumps near Liberty's gown hemline behind the foot (photo)

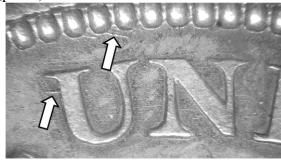


- Wavy line in the shield's recessed area below the (LIBER)T(Y) (photo)
- Recut stars 3, 4, and 10

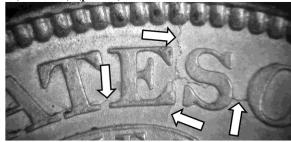


**Reverse AA** 

Very small S mintmark under the crotch; tine to the right off the lower serif of the (HAL)F (photo)



• Tine to the left from the left upright of the U(NITED) and another from the dentil above the U(NITED) (photo)



 Heavy die crack from the dentil splits between (STAT)ES to the OF A(MERICA) and along the base of STATES (photo)

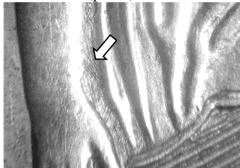
Date grid: M4.5, .030"	147 r	eeds	r	Гуріcal diameter = 1.214"	Rarity - 3
Drapery die state: Partial Foot support:				Dentils: Obverse - Full; Rev	erse - Full
Grade of coin depicted: MS61				Coin from the Randy Wiley	Collection
Cross reference: WB-102.					Version 2.34

# 1876-S WB-40, Very small Recut S

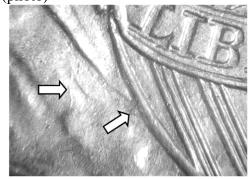
**Obverse 34** 



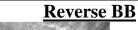
• Centered date (photo)



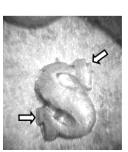
• Scattered die lines in the recessed area of the gown to the right of Liberty's left wrist (photo)



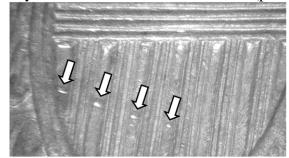
• Hook shaped lint mark on the rock to the left of the shield and small rust lump along the shield's left edge (photo)



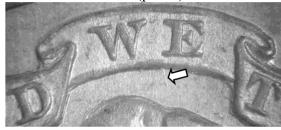




• Very small S mintmark recut southeast (photo)



 Heavy diagonal line in the recessed areas of the shield's vertical lines (photo)



- Small tine from the scroll below the (W)E (photo)
- Scattered die polish lines in the feathers below the shield tip
- Fine die crack on top of (AME)RIC(A)

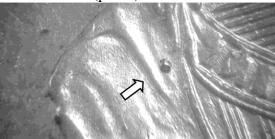
The lone example of this die marriage studied has proof-like surfaces.								
Date grid: M4, .026"	147 r	reeds	T	ypical diameter = 1.214"	Rarity - 4			
Drapery die state: Full		Foot support: Strong		Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: N	MS60			Coin from the Dick Osburn Collection				
Cross reference: WB-102	2.		Version 2.34					

# 1876-S WB-41, Very small S

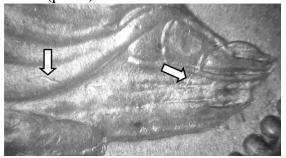
Obverse 35



Centered date (photo)



Diagonal die line in the rock to the left of the shield (photo)

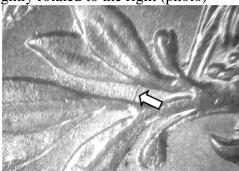


- Lint mark on the gown's hemline behind the heel and a line from Liberty's foot into the rock support (photo)
- Small lump on Liberty's stomach
- Scattered rust lumps on Liberty's neck
- Unfinished under Liberty's chin

**Reverse CC** 



Very small S mintmark below the crotch and slightly rotated to the right (photo)

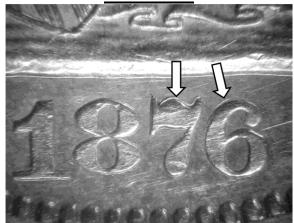


- Die lines in the recessed area between the upper olive leaf stems (photo)
- Unfinished recessed area of the upper right vertical shield lines

Date grid: M4.5, .025"				Гуріcal diameter = Jnknown"	Rarity - 4
Drapery die state: Full	Foot support: Strong	5	Dentils: Obverse - Full; Revo	erse - Full	
Grade of coin depicted: PCGS MS64				Coin from the Dick Osburn C	Collection
Cross reference: WB-102	2.				Version 2.34

### 1876-S WB-42, Type 2, Very small Recut S

Obverse 36

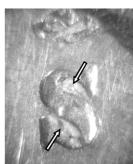


- Date left with the 76 recut south (photo). The tops of the 76 show evidence of the first punching.
- All stars recut
- Unfinished under Liberty's chin
- This obverse die is found with proof-like surfaces and frosty lustrous surfaces.

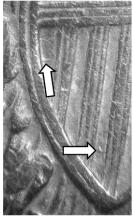
#### **Reverse DD**

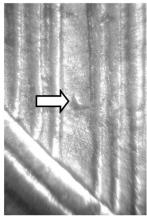
Type 2 reverse





• Very small S mintmark centered below the feather tip (photo). The mintmark is recut to the lower left; the first punching shows inside the lower loop of the S (above right photo).





• Horizontal die line in the left edge of the shield; an odd-shaped lump in the lower left recessed area appears to be the lower remnants of a misplaced "S"? (photos)

This die marriage is rare and popular for the introduction of the new reverse hub. Estimates of known coins vary but all seem to have a population of around 50. All known high grade coins have some proof-like surfaces on the obverse, reverse, or both leading some numismatists to believe this variety was specially struck to commemorate the nation's Centennial celebrations. Currently, I know of no facts to substantiate this claim.

When the 1992 half dollar reference was written, this was the only known reverse die with the type 2 hub. Since then, another was discovered by Randy Wiley during the Eliasberg Sale and is listed separately as WB-43.

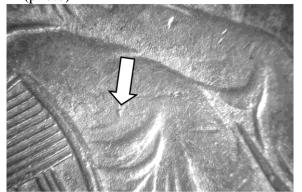
Date grid: M2, .025"	141 reeds		Typical diameter = $1.203$ " Rarity - 6	5
Drapery die state: Partial	Foot supp	ort: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: A	.U55		Coin from the Bill Bugert Collection	
Cross reference: WB-103	•		Version	2.34

# 1876-S WB-43, Type 2, Very small S

Obverse 37



Date left slanting slightly up to the right (photo)



- Small lump on left thigh to the right of the horizontal shield lines (photo)
- Frosty devices but proof-like fields

Reverse EE

Type 2 reverse



Very small S mintmark tilting slightly to the left under the feather tip (photo). The mintmark is not recut as the other Type 2 reverse variety but is filled.



- Type 2 closed lower bud (photo)
- Frosty devices but proof-like fields

This die marriage is extremely rare; it has very proof-like surfaces and the only example seen by Wiley and Bugert was in the Eliasberg Collection.

Had and Buggir was in the Endseet Besite train							
Date grid: M2.5, .034"	147 r	reeds	Typical diameter = 1.206" Rarity - 7				
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: M	MS63		Coin from the Randy Wiley Collection				
Cross reference: WB-103	3.		Version 2	2.34			

#### 1877-S

With a very high mintage, there are plenty of die marriages to challenge the collector. With at least thirty-eight die marriages, this date includes two mintmark sizes: the micro S and the very small S with two reverse hubs. Most of the die marriages are not cracked (as is 1875-S), but there are plenty of interesting diagnostics (multiple lumps, lines, die gouges, minor die cracks) to distinguish the dies.

As mentioned in the introductory section, I believe there are more 1876-S and 1877-S die marriages yet to be discovered. There are just too many dies and too high a mintage for me to feel confident all the 1877-S die marriage shave been discovered and documented. This *Register* is an excellent starting point for 1876-S and 1877-S. If your die marriage is not listed here, it is mostly likely a new one and I ask that you contact Randy or I to get it properly documented.

The estimated rarities for most of the 1877-S die marriages are at best my educated guesses. With so many die marriages (38 listed herein with more likely to be documented) and so many 1877-S coins available (I estimate as many as 17,000 or more), true rarity rarities will take years of study once a die marriage baseline such as this reference is established and used.

Additionally, this date has more No drapery die states than any other date in the Liberty Seated Half Dollar series. Collectors will find them very abundant in 1877-S.

Thirty-eight die marriages are known as depicted in the following tables.

Mintage	Number of dies	Number Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
	Requested	-	Unknown	Unknown	2
5,356,000	Shipped	-	Unknown	Unknown	(147, 148, 149)
	Known	38	31	31	(147, 148, 149)

1877-S date grid quick reference table

<u> </u>	
Obverse date grid	Die Marriage
M2, .030"	WB-6
M2, .030"	WB-38
M2.5, .030"	WB-16
M2.5, .030"	WB-22
M2.5, .032"	WB-25
M3, .025"	WB-9
M3, .026"	WB-11
M3, .027"	WB-24
M3, .030"	WB-7
M3, .030"	WB-8
M3, .030"	WB-17
M3, .030"	WB-30
M3, .032"	WB-28
M3, .032"	WB-33
M3, .033"	WB-29
M3.5, .026"	WB-5
M3.5, .026"	WB-35
M3.5, .030"	WB-18
M3.5, .030"	WB-19
M3.5, .033"	WB-1
M4, .022"	WB-12
M4, .027"	WB-10
M4, .030"	WB-13
M4, .030"	WB-14
M4, .030"	WB-21
M4, .030"	WB-37
M4, .032"	WB-20
M4, .033"	WB-26
M4.5, .025"	WB-27
M4.5, .026"	WB-2
M4.5, .026"	WB-23
M4.5, .028"	WB-36
M4.5, .032"	WB-15
M5, .024"	WB-32
M5, .026"	WB-3
M5, .028"	WB-31
M5, .030"	WB-4
M5, .031"	WB-34
1413, .031	WD-24

1877-S Obverse and Reverse die identification		Diagonal die lines thru upper left shield	Lump in lower right horizontal shield lines	Die line in eagle's left wing	Weird (HAL)F	Crud in upper (ST)A(TES)	Tripled S	Crud on left side of vertical shield lines	Mintmark high under feather tip	Radial die crack thru (AMER)I(CA)
keys					Type	1 Revers	e Hub			
Part 1			Mic	ero S Min	tmark		V	ery small	S Mintma	ırk
		A	<b>B</b>	C	D S	E	F	G	H	I
Lump in gown's hem	1	WB-1								
Lump on neckline	2	WB-2								
Die line on neck	3	WB-3								
Curved line below scroll	4		WB-4							
Line by index finger	5			WB-5						
Lines below instep	6				WB-6					
Clash lines across lap	7					WB-7	WB-8			
Centered date	8							WB-9		
Lump in rock to left of index finger	9								WB-10	
Line below instep	10									WB-11

(Continued on next table)

(Continued from previous table)

(Continued	110111	previous i	iauic)	1			•	,		
1877-S Obverse and Reverse die identification		Line in eagle's left wing	Lump in center of (G)O(D)	Tine on middle serif of W(E)	Lump on scroll edge above G(OD)	Lump inside lower shield	\$ Mintmark	Lump in lower left shield	Lump on lower left outside edge of shield	\$ Mintmark
keys		Type 1	Type	2 Reverse	e Hub	Type 1	Type 2	Type 1	Тур	e 2
Part 2		Ve	ry small S	S Mintma	ırk	Micro S	V. Sm S	Micro S	Very S	mall S
		J	K	L	M	N )/ ~ ? 	0	P	Q	R
Lump in upper right shield	11	WB-12								
Line in gown's lower loop	12	WB-14	WB-13							
Line between eye and ear	13			WB-15						
Heavy line by left wrist	14			WB-16	WB-17					
Lump between thighs	15				WB-18	WB-19				
Crossed lines in lap	16						WB-20	WB-21		
"Horns" on 77	17								WB-22	
Gouges across Liberty's stomach	18									WB-23

(Continued on next table)

(Continued from previous table)

(Continued from	Prov		· ·							1
1877-S Obverse a Reverse d identificat keys	nd lie	Crumbling die on upper right wing	Type 1 over 2 reverse hubs	Lump on shield's upper edge	Lump on middle of eagle's neck	Die crack above AMERICA to edge	Lump and die line on eagle's upper neck	Recut S	Diagonal die line thru W(E)	Very small S below the feather tip
Port 3		Type 2	<b>Type</b> 1/2			Type	2 Revers	e hub		
Part 3		S	T	U	V	W	X	Y	Z	AA
Lumps in shield	19	WB-24								
Lumps in gown to right of shield	20		WB-25							
Parallel lines in lower gown	21			WB-26						
Arching die gouge across lower gown	22				WB-27					
Lump below right knee	23					WB-28	WB-29			
Lump in gown loop	24							WB-30		
Rusty die	25								WB-31	WB-32

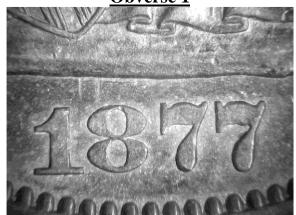
(Continued on next table)

(Continued from previous table)

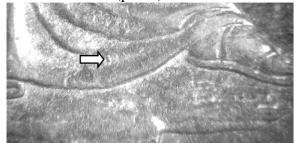
1877-S Obverse and Reverse die identification keys		Lump in eagle's right wing	Lines in upper right wing	Very small S under feather tip and tilted to the right	Die chip in upper left shield
			Type 2 Re	everse hub	
Part 4	Part 4		CC	DD	EE
Curved line in the lower right corner of the shield	28	WB-35			
Lines in rock	29		WB-36		
Lumps in Liberty's gown to the right of the scroll	30			WB-37	
Die gouge across right breast	31				WB-38

## 1877-S WB-1, Type 1, Micro S

Obverse 1



• Centered date (photo)



• Small lump in gown's hem behind Liberty's foot (photo)

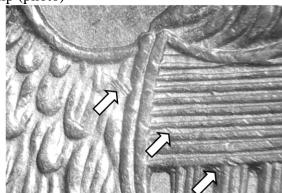


• Lump at base of Liberty's neck (photo)

Reverse A
Type 1 Reverse



 Micro S mintmark low in field below the feather tip (photo)



 Diagonal (NW to SE) die lines along the upper left shield (photo)



- Horizontal die line thru WE (photo)
- Raised wavy line in the eagle's far right wing

This is the first use of this reverse die.				
Date grid: M3.5, .033"	147 r	reeds	Typical diameter = 1.209"	Rarity - 3
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58			Coin from the Bill Bugert Co	ollection
Cross reference: WB-101.				Version 2.34

### 1877-S WB-2, Type 1, Micro S

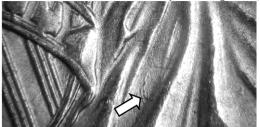
Obverse 2



Date right (photo)



• Lump on Liberty's lower left neck line and a curved line under Liberty's ear (photo)

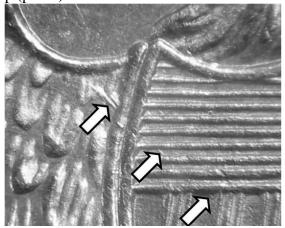


• Wavy lines in Liberty's gown to the right of the scroll end (photo)

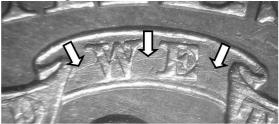
Reverse A
Type 1 Reverse



• Micro S mintmark low in field below the feather tip (photo)



• Diagonal (NW to SE) die lines along the upper left shield (photo)



- Horizontal die line thru WE (photo)
- Raised wavy line in the eagle's far right wing

This is the second use of this reverse die.

Date grid: M4.5, .026" | 147 reeds | Typical diameter = 1.209" | Rarity - 3

Drapery die state: Partial | Foot support: Strong | Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: MS63 | Coin from the Randy Wiley Collection

Cross reference: WB-101. | Version 2.34

# 1877-S WB-3, Type 1, Micro S

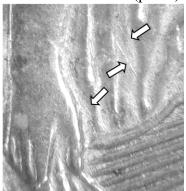
Obverse 3



• Date right (photo)



• Faint horizontal die line on Liberty's neck and another under the ear (photo)

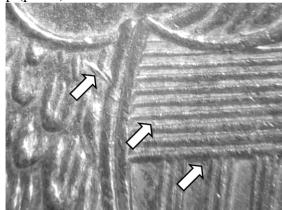


• Diagonal die lines in Liberty's gown to the upper right of the left hand (photo)

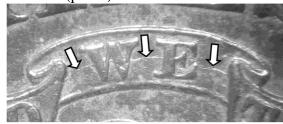
Reverse A
Type 1 Reverse



• Micro S mintmark low in field below the feather tip (photo)



• Diagonal (NW to SE) die lines along the upper left shield (photo)



- Horizontal die line thru WE (photo)
- Raised wavy line in the eagle's far right wing
- Weak tail feathers below shield

This is the third use of this reverse die.					
Date grid: M5, .026"	147 r	reeds	Т	Sypical diameter = 1.209"	Rarity - 3
Drapery die state: Full	Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS64				Coin from the Randy Wiley C	Collection
Cross reference: WB-101.					Version 2.34

# 1877-S WB-4, Type 1, Micro S

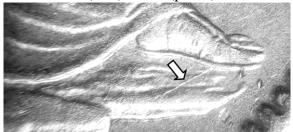
#### Obverse 4



• Date right with a small lump on top of the second 7(photo)



• Curved die line in the shield below the scroll and (LIB)ERTY (photo)



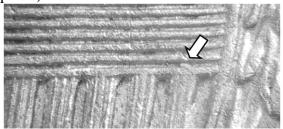
- Diagonal die line thru Liberty's foot (photo)
- Faint horizontal die line below Liberty's chin

### Reverse B





 Micro S mintmark low and below the feather tip (photo)



• Small lump in the shield's lower right horizontal lines (photo)



- Lump between WE on scroll (photo)
- This die is transitional with 1876-S.

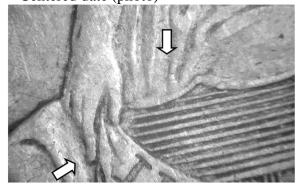
Date grid: M5, .030"	147 reeds		]	Гурісаl diameter = 1.206"	Rarity - 3
Drapery die state: Partial	Orapery die state: Partial Foot support: Weak			Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU50				Coin from the Randy Wiley Collection	
Cross reference: WB-101.					Version 2.34

# 1877-S WB-5, Type 1, Micro S

#### Obverse 5



• Centered date (photo)

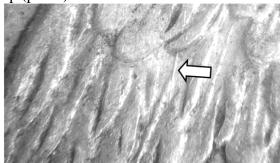


• Diagonal die line to the left of Liberty's index finger and small lump in the gown to the right of Liberty's wrist (photo)

Reverse C
Type 1 Reverse



 Micro S mintmark low and below the feather tip (photo)



- Vertical die line in the eagle's left wing (photo)
- Weak tail feathers below shield

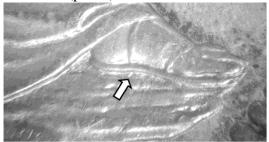
Date grid: M3.5, .026"	147 reeds		Typical diameter = 1.210" Rarity - 3	
Drapery die state: Weak Foot support: Strong		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection	
Cross reference: WB-101.			Version 2.34	

# 1877-S WB-6, Type 1, Micro S, Weird F

Obverse 6



• Date left (photo)



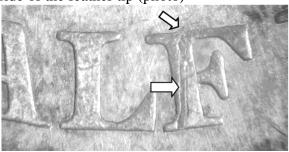
- Small lines below the heel and instep of Liberty's foot (photo)
- Die crack in the rock support to the left of the ribbon end
- Unfinished under Liberty's chin

Reverse D

Type 1 Reverse



• Micro S mintmark in the field below the right side of the feather tip (photo)



- "Weird F": Vertical raised strip thru the upright of the (HAL)F that I cannot explain. Seen on at least two coins so this is not a damaged coin and this defect is most likely die damage.
- Weak tip on the second lowest olive leaf

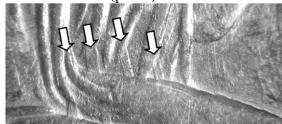
See also Bowers and Merena 11/1992: 1352.					
Date grid: M2, .030"	147 r	147 reeds		pical diameter = 1.209"	Rarity - 7
Drapery die state: Full Foot support: Strong			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS62			•	Coin from the Randy Wiley	Collection
Cross reference: WB-101.					Version 2.34

# 1877-S WB-7, Type 1, Micro S

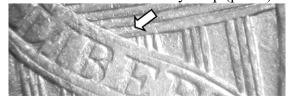
#### Obverse 7



• Centered date (photo)



• Clash lines across Liberty's lap (photo)



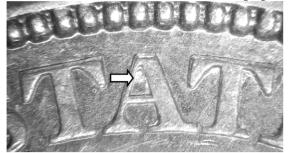
• Two short parallel lines in the shield above (LI)BE(RTY)

#### Reverse E

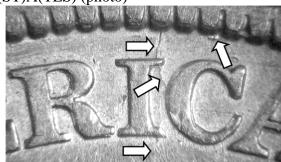
Type 1 Reverse



• Micro S mintmark below the feather tip (photo)



• Unfinished "crud" in the upper triangle of the (ST)A(TES) (photo)



- All die states: small lump from dentils above (AMERI)C(A) (above photo)
- LDS: die crack from dentils thru (AMER)IC(A) (above photo)

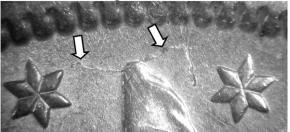
This is the first use of this	s obverse	die.			
Date grid: M3, .030"	147 reed	147 reeds		oical diameter = 1.209"	Rarity - 3
Drapery die state: Partial None	Drapery die state: Partial to None Foot support: Stroi		5	Dentils: Obverse - Full; R	Reverse - Full
Grade of coin depicted: AU55			С	oin from the Randy Wiley C	Collection
Cross reference: WB-102	1.				Version 2.34

### 1877-S WB-8, Type 1, Very small S/S/S

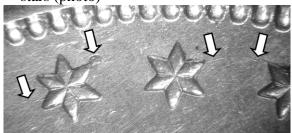
Obverse 7



Centered date (photo)

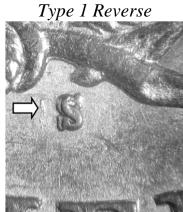


• LDS: die crack along the cap and adjacent stars (photo)

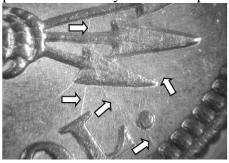


- LDS: die crack thru stars 4-7 with a tiny cud forming on star 4 (photo)
- Die crack thru Liberty's foot and another thru stars 11
- Two short parallel lines in the shield above (LI)B(ERTY)
- VLDS: long curved die clash in the field from above Liberty's ankle (may appear to be a die crack)

Reverse F



• Very small S mintmark, so-called "Triple punched S/S/S Mintmark." Most likely a doubled S mintmark (with bounce doubling on the mintmark itself) and another shadow of an S in the field to the left of the prominent S. All examples of this variety have the triple S.



LDS: die crack from rim thru period to arrows (photo)



LDS: die crack from dentil to (AMERIC)A and another off upper arrowhead (photo)

This is the second use of this obverse die.

Date grid: M3, .030" | 147 reeds | Typical diameter = 1.211" | Rarity - 3

Drapery die state: Partial to None | Foot support: Weak | Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: MS65 | Coin from the Randy Wiley Collection

Cross reference: WB-103. | Version 2.34

# 1877-S WB-9, Type 1, Very small S

**Obverse 8** 



Centered date slanting up to right (photo)



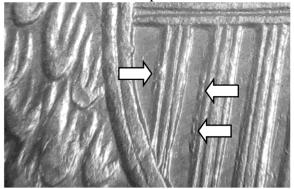
Small lump in the rock to the left of the Liberty's index finger tip (photo)

Reverse G

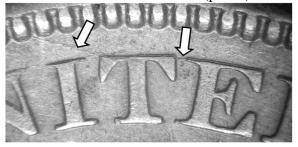
Type 1 Reverse



Very small S mintmark below the feather tip and slanting slightly to the left (photo). The doubling on the mintmark in the photo is bounce doubling.



"Crud" (unfinished die?) along the left side of vertical shield lines A1 and B1 (photo)



- LDS: die crack from dentil above I thru the tops of letters (UNI)TED (photo)
- LDS: weak tail feathers below shield

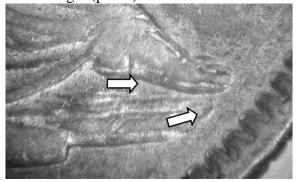
Date grid: M3, .025"	147 reed	ds	Typ	pical diameter = 1.210"	Rarity - 3
Drapery die state: Full to	None	Foot support: Stre	ong	Dentils: Obverse - Full	; Reverse - Full
Grade of coin depicted: AU50			C	oin from the Randy Wile	y Collection
Cross reference: WB-New.					Version 2.34

# 1877-S WB-10, Type 1, Very small S

#### Obverse 9



• Date right (photo)



• Two faint vertical die lines; one from Liberty's instep into the rock support and another in the rock support below Liberty's toes (photo) Reverse H
Type 1 Reverse



• Very small S mintmark high, under the feather tip, and tilted to the left (photo)



- Wavy die crack along the top of letters (AME)RI(CA) (photo)
- Weak tail feathers below shield
- Weak upper right feathers on the eagle's left wing

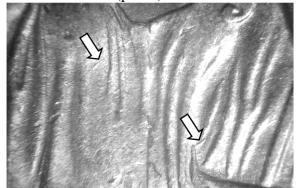
Date grid: M4, .027"	147 ı	eeds	,	Typical diameter = 1.207"	Rarity - 3
Drapery die state: None		Foot support: Stron	5	Dentils: Obverse - Full; Revo	erse - Full
Grade of coin depicted: XF45				Coin from the Bill Bugert Co	llection
Cross reference: WB-102.					Version 2.34

# 1877-S WB-11, Type 1, Very small S

Obverse 10



• Centered date (photo)



- Diagonal line below Liberty's left breast and another in the gown to the right of Liberty's stomach (photo)
- Die crack from cap thru stars 9-12
- Unfinished under Liberty's chin
- LDS: die crack from the field below the rock support thru the foot support and toes

Reverse I
Type 1 Reverse



• Very small S mintmark below the feather tip and tilted slightly to the left (photo); unusual for the open space (die finishing) inside the mintmark



- LDS: die crack from the rim thru (AMER)I(CA) to the eagle's wing (photo)
- Weak tail feathers below shield
- This die is transitional with 1876-S.

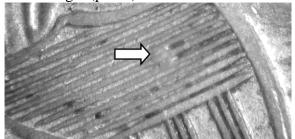
Date grid: M3, .026"	147 reeds		,	Typical diameter = 1.203"	Rarity - 3
Drapery die state: Full		Foot support: V	Weak	Dentils: Obverse - Full; Rev	erse - Full
Grade of coin depicted: MS63				Coin from the Randy Wiley	Collection
Cross reference: WB-102.					Version 2.34

# 1877-S WB-12, Type 1, Very small S

Obverse 11



• Date right (photo)

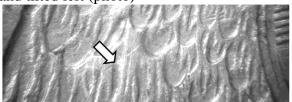


- Lump in the upper right horizontal shield lines (photo)
- Tiny lump in the unfinished area under Liberty's chin

Reverse J
Type 1 Reverse



• Very small S mintmark high under the feather tip and tilted left (photo)

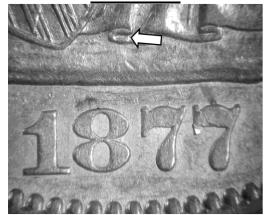


• LDS only: diagonal (SW to NE) line in the eagle's left wing to the left of the lower shield line (photo)

This is the first use of this reverse die.					
Date grid: M4, .022"	147 reeds		Typical diameter = 1.203"	Rarity - 3	
Drapery die state: Full	Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF45			Coin from the Bill Bugert Collection		
Cross reference: WB-102.			Version 2.34		

### 1877-S WB-13, Type 2, Very small S

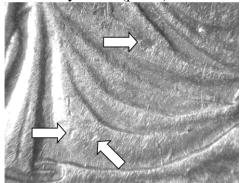
#### **Obverse 12**



 Date right with a small vertical line in Liberty's gown's lower loop (photo)



• Vertical die line in the rock support below the ball of Liberty's foot (photo)



- Scattered small lumps in the Liberty's gown behind the foot (photo)
- Unfinished under Liberty's chin
- Recut stars 2, 3, 4,6, and 7

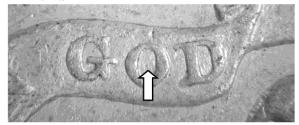
Reverse K Type 2 Reverse





Rarity - 3

• Very small S mintmark under the feather tip and tilted to the right (photos); filled mintmark



- Tiny lump in the center of (G)O(D) (photo)
- Weak tail feathers below shield
- Rusty eagle and scroll

This is the first use of this	s obverse die and the second u	se of this reverse die.
Date grid: M4, .030"	147 reeds	Typical diameter = 1.204"

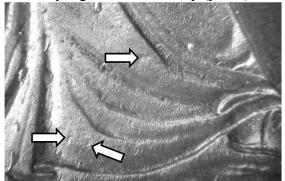
Drapery die state: Full	Foot support: Strong	Dentils: Obverse - Full; Reverse - Full
Grade of coin depicted: AU50		Coin from the Randy Wiley Collection
Cross reference: WB-104		Version 2.34

# 1877-S WB-14, Type 1, Very small S

Obverse 12



• Date right with a small vertical line in Liberty's gown's lower loop (photo)



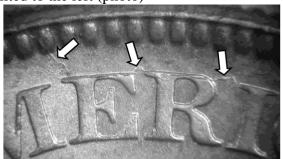
- Scattered small lumps in the Liberty's gown behind the foot (photo)
- Unfinished under Liberty's chin
- Recut stars 2, 3, 4, 6, and 7

Reverse J

Type 1 Reverse



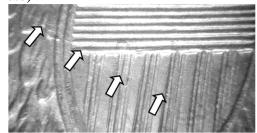
 Very small S mintmark under the feather tip and tilted to the left (photo)



• Die crack from the rim to the upper left E thru (AM)ERIC(A) (photo)



 Small tine off the middle serif of the W(E) (photo)



• Faint diagonal die crack thru the upper shield (photo)

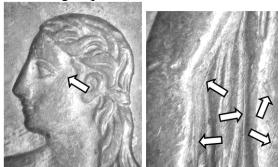
This is the second use of this obverse die.					
Date grid: M4, .030" 147 reeds			Typical diameter = 1.210"	Rarity - 4	
Drapery die state: None Foot support: Weak			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: M	MS63		Coin from the Randy Wiley	Collection	
Cross reference: WB-102	2.			Version 2.34	

# 1877-S WB-15, Type 2, Very small S

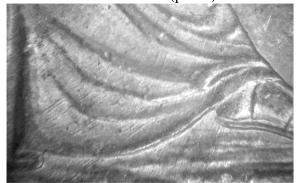
**Obverse 13** 



• Date right (photo)



- Diagonal line between Liberty's eye and ear (above left photo)
- Lines and a lump to the right of Liberty's left elbow and forearm(photo)



• Circular die polish lines in the Liberty's gown behind her foot (photo)

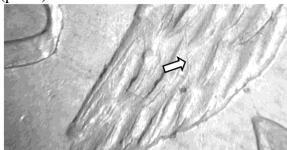
Reverse L
Type 2 Reverse



• Very small S mintmark upright below the feather tip (photo)



• Rusty lump in the lower inside tip of the shield (photo)



- Vertical die line in lower left wing (photo)
- Die crack in the scroll along the tops of (TR)UST to upper right wing tip
- Weak tail feathers below shield
- Faint die crack from upper arrowhead's tip towards (AMERICA)A

This is the first use of this reverse die.

Date grid: M4.5, .032"	148 reeds		Туріс	eal diameter = 1.208"	Rarity - 4		
Drapery die state: Full to Partial Foot support: Wea		k Dentils: Obverse - Full; Reverse - Full					
Grade of coin depicted: AU58				n from the Bill Bugert Co	llection		
Cross reference: WB-104.					Version 2.34		

### 1877-S WB-16, Type 2, Very small S

Obverse 14

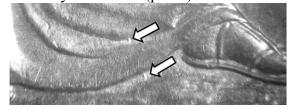


• Centered date with a lump on the lower left loop of the 8 (photo)





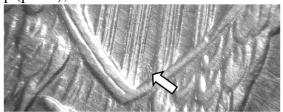
 Small lump on Liberty's neck (above left photo) and diagonal die line in gown from Liberty's left wrist (photo)



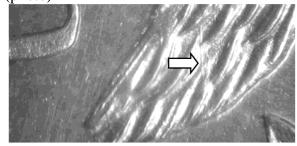
 Two small lumps (most likely a continuous line) in the gown hem behind Liberty's foot (photo) Reverse L Type 2 Reverse



• Very small S mintmark upright below the feather tip (photo); unfinished inside mintmark



 Rusty lump in the lower inside tip of the shield (photo)



- Vertical die line in lower left wing (photo)
- Die crack in the scroll along the tops of (TR)UST to upper right wing tip
- Weak tail feathers below shield

This is the first use of this obverse die and the second use of this reverse die. High grade coins can be found proof-like.

Date grid: M2.5, .030" 148 r		reeds	Гуріcal diameter = 1.209" Rarity - 4		
Drapery die state: None		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: N	<b>MS</b> 60	Coin from the Randy Wiley C	Collection		
Cross reference: WB-104	1.			Version 2.34	

# 1877-S WB-17, Type 2, Very small S

Obverse 14

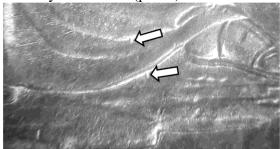


• Centered date with a lump on the lower left loop of the 8 (photo)





 Small lump on Liberty's neck (above left photo) and diagonal die line in gown from Liberty's left wrist (photo)

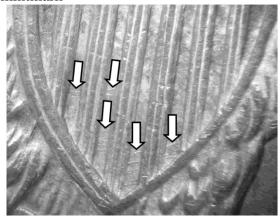


 Two small lumps (most likely a continuous line) in the gown hem behind Liberty's foot (photo)

Reverse M Type 2 Reverse



 Very small S mintmark high and centered under the feather tip (photo); unfinished inside mintmark



 Horizontal die lines in the recessed area of the lower shield (photo)



- Small lump on the upper scroll edge above the G(OD) (photo)
- Weak tail feathers below shield
- Die crack connects bottoms of letter (O)F A(MERICA)
- Die cracks at the tips of upper two arrowheads

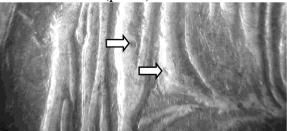
This is the second use of this obverse die and the first use of this reverse die.						
Date grid: M3, .030"	eeds	Γ	Typical diameter = 1.208"	Rarity - 4		
Drapery die state: None Foot		Foot support: Weak		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: M	MS62		Coin from the Randy Wiley Collection			
Cross reference: WB-104	4.				Version 2.34	

# 1877-S WB-18, Type 2, Very small S

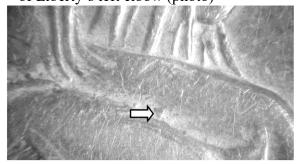
#### Obverse 15



• Centered date (photo)



• Small lumps in Liberty's gown to the right of Liberty's left elbow (photo)



- Small lump between Liberty's thighs (photo)
- Unfinished under Liberty's chin (photo)

Reverse M



 Very small S mintmark high and centered under the feather tip (photo); unfinished inside mintmark



- Small lump on the upper scroll edge above the G(OD) (photo
- Weak tail feathers below shield
- Die crack connects bottoms of letter (O)F A(MERICA)
- Die cracks at tips of upper two arrowheads

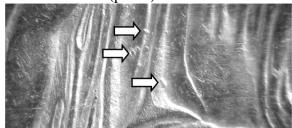
ommenou unuoi zie oitij o omm (piie te)						
This is the first use of this obverse die and the second use of this reverse die.						
Date grid: M3.5, .030"   148 reeds   Typical diameter = 1.209"						
Drapery die state: Full		Foot support: Weak	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: A	AU50		Coin from the Bill Bugert Co	llection		
Cross reference: WB-104	1.			Version 2.34		

# 1877-S WB-19, Type 1, Micro S

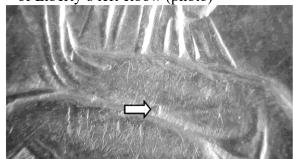
Obverse 15



• Centered date (photo)



• Small lumps in Liberty's gown to the right of Liberty's left elbow (photo)



- Small lump between Liberty's thighs (photo)
- Die cracks along the left edge of the rock support and rock and also thru the foot
- Unfinished under Liberty's chin (photo)

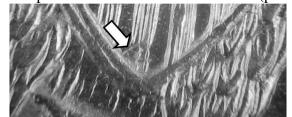
Reverse N Type 1 Reverse



 Micro S mintmark low, to the right, and slanting to the right (photo); unfinished inside mintmark



• Lump on the scroll to the left of the IN (photo)



- Large lump or defect at the base of C1-3 inside lower shield (photo)
- Weak tail feathers below shield
- Weak olive leaf tips

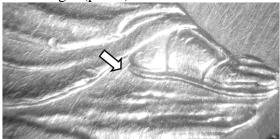
This is the second use of this obverse die.						
Date grid: M3.5, .030" 148 reeds				Typical diameter = 1.210"	Rarity - 4	
Drapery die state: Partial Foot support: Weak				Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS60				Coin from the Randy Wiley (	Collection	
Cross reference: WB-101.					Version 2.34	

### 1877-S WB-20, Type 2, Very small \$ mintmark

Obverse 16



Date right (photo)



 Diagonal die lines in the rock support behind Liberty's heel (photo

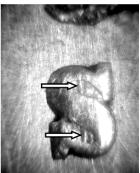


- Cross die lines to the left of the pole in Liberty's lap; no drapery below the elbow (photo)
- Faint die cracks around and between stars 5-7
- Recut stars 3-6 and 11-13

**Reverse O** 

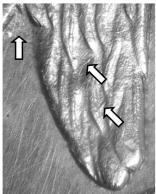
Type 2 Reverse





Very small S mintmark below the feather tip;
 vertical die line thru the center of the mintmark shaping it as a "\$".





- Upside down "V" shaped die lines in the eagle's lower left wing (above left photo)
- Unfinished under the eagle's right wing (above right photo)
- Two die lines in the eagle's lower right wing (above right photo)
- Rust lumps on all devices

This is the first use of this obverse die. Found proof-like probably from excessive polishing to remove rust on the die.

Date grid: M4, .032" 147 reeds Typical diameter = 1.211" Rarity - 3

Drapery die state: Full to None Foot support: Strong Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: MS62 Coin from the Randy Wiley Collection

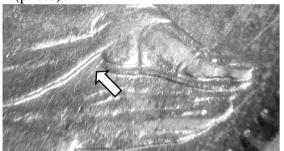
Cross reference: WB-104. Version 2.34

### 1877-S WB-21, Type 1, Micro S

Obverse 16

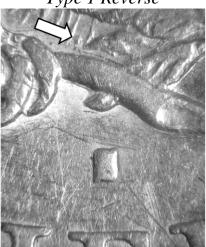


• Date right with the bottoms of the 77 showing bounce doubling (not recutting) (photo)

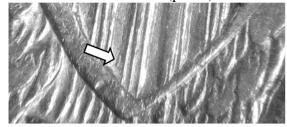


- Cross die lines to the left of the pole in Liberty's lap; no drapery below the elbow (photo)
- Faint die cracks around and between stars 5-7
- Recut stars 3-6 and 11-13

Reverse P
Type 1 Reverse



• Filled micro S mintmark centered in the field below the feather tip; lump above the olive stem behind the arrow feathers (photo)



- Small lump in the lower left shield (photo)
- Weak tail feathers below shield

This is the second use of this obverse die.

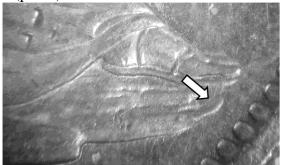
Date grid: M4, .030" 147 reeds		eeds	Typical diameter = 1.208" Rarity - 3	
Drapery die state: None		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU55			Coin from the Bill Bugert Collection	
Cross reference: WB-101.			Version 2.34	

# 1877-S WB-22, Type 2, Very small S

#### Obverse 17



• Date left (photo) with short spikes, "horns," on the upper right serifs of the 77 (photo)



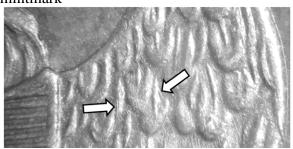
• Diagonal die crack thru Liberty's foot (photo)

#### **Reverse Q**

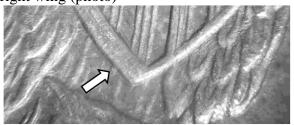
Type 2 Reverse



 Very small S mintmark below the feather tip and tilted to the left (photo); unfinished inside the mintmark



• Two die lines in the feathers of the eagle's upper right wing (photo)



• Small lump along the outside lower left edge of the shield (photo)

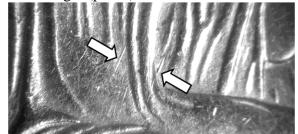
Date grid: M2.5, .030"	147 r	reeds	Typical diameter = 1.210"	Rarity - 3
Drapery die state: Full		Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU58			Coin from the Randy Wiley	Collection
Cross reference: WB-104.				Version 2.34

# 1877-S WB-23, Type 2, Very small \$ mintmark

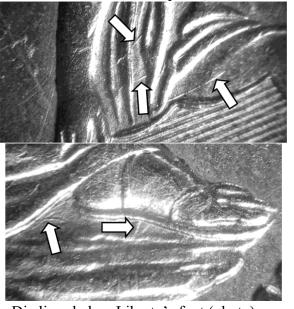
Obverse 18



• Date right (photo)



• Scattered die gouges across Liberty's stomach (above photo) and in her left gown above the shield (below photo)



Reverse R
Type 2 Reverse





- Very small S mintmark below the feather tip; vertical die line thru the center of the mintmark shaping it as a "\$." The mintmark appears to be recut in this photograph but I believe it is bounce doubling.
- Diagonal (NE to SW) file line thru center of (W)E on scroll
- Weak tail feathers below shield

• Die lines below Liberty's foot (photo)

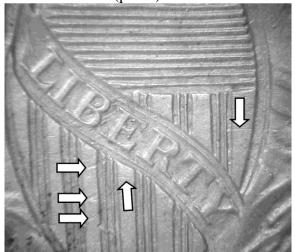
Date grid: M4.5, .026"	147 reeds	Typical diameter = 1.208"	Rarity - 3
Drapery die state: Partial	Foot support: Strong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: M	<b>1</b> S61	Coin from the Randy Wiley	Collection
Cross reference: WB-104			Version 2.34

#### 1877-S WB-24, Type 2, Very small S

#### Obverse 19



• Centered date (photo)



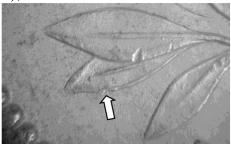
 Scattered lumps and lines in the recessed area between the shield's vertical lines most prominently by the upper right vertical shield lines into the gown and below the (LI)B(ERTY) (photo)

#### **Reverse S**

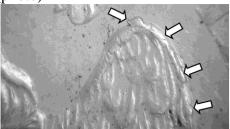
Type 2 Reverse



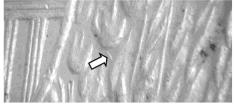
 Very small S mintmark below the feather tip (photo); unfinished inside mintmark



• Lump on lower edge of the second lowest olive leaf (photo)



• Crumbling die on the upper right edge of the eagle's wing (photo)



• Die line in the eagle's right wing near the shield (photo)

• Nearly no feathers below the shield

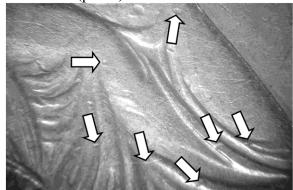
Date grid: M3, .027"	147 reeds	Typical diameter = 1.209"	Rarity - 3	
Drapery die state: Very weak Foot support: Strong		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: A	AU53	Coin from the Randy Wiley Collection		
Cross reference: WB-104	1.		Version 2.34	

#### 1877-S WB-25, Type 1/2, Very small S

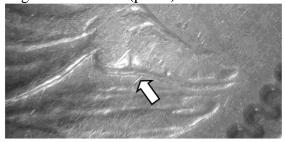
Obverse 20



Date left (photo)



• Scattered lumps in Liberty's gown to the right of the shield (photo)

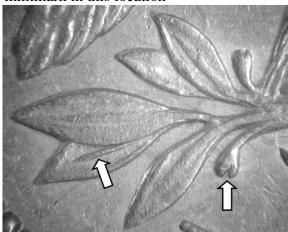


• Line in rock support below Liberty's foot (photo)

Reverse T
Type 1/2 Reverse



• Very small S mintmark very high and to the left of the feather tip (photo); only die with the mintmark in this location



• Type 1 over type 2 hub: olive leaf stem vein raised on leaf 2 and split lower berry (photo). This die is the only known transitional hubbed die for 1877-S.

Date grid: M2.5, .032"	149 reeds		-	Гуріcal diameter = 1.211"	Rarity - 5
Drapery die state: Full	die state: Full Foot support: Strong		ng	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45				Coin from the Bill Bugert Collection	
Cross reference: New.					Version 2.34

## 1877-S WB-26, Type 2, Very small S

Obverse 21



• Date right (photo)

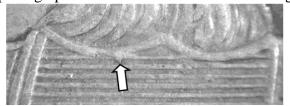


- Two parallel die lines in Liberty's lower gown (photo)
- Small file line from Liberty's left thumb above the ribbon

Reverse U
Type 2 Reverse



 Very small S mintmark below feather tip and recut east (photo); unfinished inside mintmark.
 The mintmark appears to be recut in this photograph but I believe it is bounce doubling.



- Small lump in the shield's border (photo)
- Weak tail feathers below shield

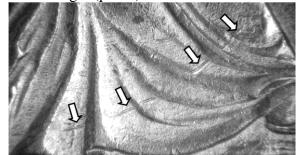
Date grid: M4, .033"	149 reeds		Typical diameter = 1.211" Ra	arity - 4
Drapery die state: Partial to		Foot support: Partial	Dentils: Obverse - Full; Reverse - Full	
None		Foot support. Partial		
Grade of coin depicted: AU58			Coin from the Bill Bugert Collection	
Cross reference: WB-104.			V	Version 2.34

### 1877-S WB-27, Type 2, Very small S

Obverse 22



• Date right (photo)



- Heavy arching die gouge across Liberty's gown (photo). These lines also extend, but are weaker, thru the lower left shield into the rock.
- Large lump in the recessed area of the shield above (LIBER)T(Y)

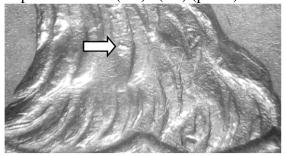
Reverse V Type 2 Reverse



 Very small S mintmark low in the filed and below the feather tip (photo); unfinished inside mintmark



 Rust marks throughout the scroll with a small lump to the left of (TR)U(ST) (photo)



- Lump in the center of the eagle's neck feathers (photo)
- Weak tail feathers below shield

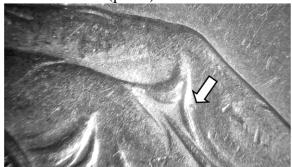
Date grid: M4.5, .025"	149 reeds		Typical diameter = 1.213"	Rarity - 4
Drapery die state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58			Coin from the Randy Wiley Collection	
Cross reference: WB-104.				Version 2.34

#### 1877-S WB-28, Type 2, Very small S

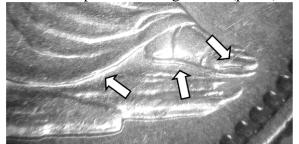
Obverse 23



Centered date (photo)



• Small lump below the right knee (photo)



- Die line in the gown hem just below the foot; diagonal die crack thru the foot (photo)
- Diagonal (NE to SW) file line thru (LI)B(ERTY)

Reverse W



• Very small S mintmark high and below the feather tip (photo); unfinished inside mintmark



- Heavy die crack on the upper edges of AMERIC(A) and E to rim above M (photo)
- Scattered die lines in the recessed area of the shield
- Weak file line on the center of the left wing

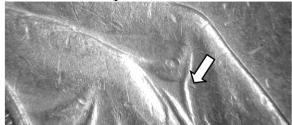
This is the first use of this obverse die.							
Date grid: M3, .032"	149 ı	eeds	Typical diameter = 1.211" Rarity - 4				
Drapery die state: None	Drapery die state: None Foot support: Weak		Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: AU58			Coin from the Randy Wiley Collection				
Cross reference: WB-104.			Version 2.34				

#### 1877-S WB-29, Type 2, Very small S

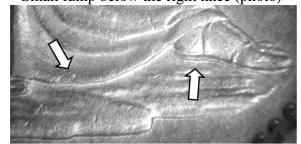
Obverse 23



• Centered date (photo)



• Small lump below the right knee (photo)



- Lump on the gown's hem; die line in the rock support below Liberty's heel; diagonal die crack thru the foot (photo)
- Diagonal (NE to SW) file line thru (LI)B(ERTY)

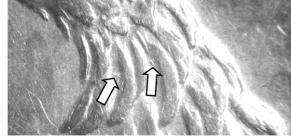
Reverse X
Type 2 Reverse



• Very small S mintmark below the feather tip (photo); unfinished inside mintmark



• Lump in the eagle's feathers to the right of the shield (photo)



- Small lump and die line in the feathers on the eagle's upper neck (photo)
- Weak tail feathers below shield
- Die crack thru bottoms of letters STATES OF A(MERICA) to scroll above G(OD)
- Small lump on top of upper arrowhead

This is the second use of this reverse die.						
Date grid: M3, .033"	147 ı	147 reeds		Typical diameter = 1.208"	Rarity - 3	
Drapery die state: None Foot support: V		Foot support: Weak		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS63				Coin from the Bill Bugert Collection		
Cross reference: WB-104.					Version 2.34	

#### 1877-S WB-30, Type 2, Very small Recut S

#### Obverse 24



- Centered date with a small lump in the lower left gown loop (photo)
- Unfinished under Liberty's chin
- LDS: die crack in rock support below Liberty's toes

# Reverse Y Type 2 Reverse





- Very small S mintmark under the feather tip and tilted to the right. The mintmark appears to be tripled but it is a doubled mintmark with additional bounce doubling. (photos)
  - Weak tail feathers below shield

Date grid: M3, .030"	147 r	reeds	]	Typical diameter = 1.210"	Rarity - 3
Drapery die state: Partial Foot support: Strong		Foot support: Strong		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU53				Coin from the Randy Wiley (	Collection
Cross reference: WB-104.					Version 2.34

### 1877-S WB-31, Type 2, Very small S

Obverse 25

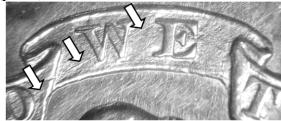


- Date right (photo)
- Extremely rusty die with raised rust lumps over the entire obverse's devices. See digits of the rusty date (above photo)

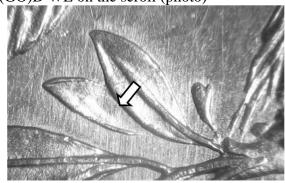
Reverse Z



• Very small S mintmark below the feather tip (photo)



 Diagonal (SW to NE) die line thru the letters (GO)D WE on the scroll (photo)

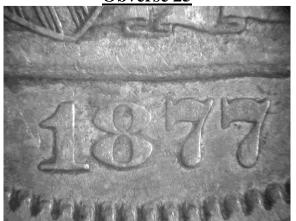


- Weak olive leaf disconnected from leaf 5 (photo)
- Weak tail feathers below shield
- Weak upper left wing feathers near shield

This is the first use of this obverse die and first use of this reverse die.						
Date grid: M5, .028"	147 ı	reeds	Typical diameter = 1.210"	Rarity - 3		
Drapery die state: None	Drapery die state: None Foot support: Weak		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: AU58			Coin from the Randy Wiley	Coin from the Randy Wiley Collection		
Cross reference: WB-104.				Version 2.34		

## 1877-S WB-32, Type 2, Very small S

#### Obverse 25



- Date right (photo)
- Extremely rusty die with raised rust lumps over the entire obverse's devices

# Reverse AA Type 2 Reverse



- Very small S mintmark below the feather tip and tilted to the right (photo)
- Weak tail feathers below shield

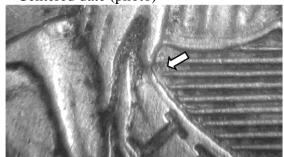
This is the second use of this obverse die and first use of this reverse die.						
Date grid: M5, .028"	Unkr	Unknown reeds		al diameter = Unknown"	Rarity - 3	
Drapery die state: Partial	Drapery die state: Partial Foot support: W		<sup>7</sup> eak	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: PCGS XF45			Coin from the Bill Bugert Collection			
Cross reference: WB-104.					Version 2.34	

#### 1877-S WB-33, Type 2, Very small S

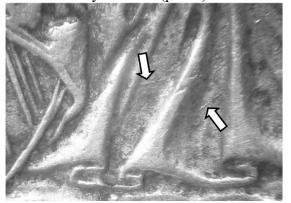
Obverse 26



• Centered date (photo)



 Diagonal die line in horizontal shield lines from Liberty's thumb (photo)

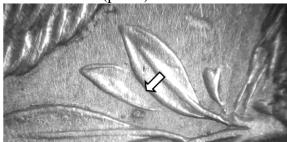


- Two lines in Liberty's gown off the end of the right scroll (photo)
- Weak lump on neck below Liberty's chin
- Recut stars 3, 11, and 12

Reverse Z
Type 2 Reverse



• Very small S mintmark below the feather tip and tilted to the left (photo)



• Olive leaf disconnected from leaf 5 (photo)



- Small lump on the outside lower edge of the G(OD) and line inside (G)O(D) (photo)
- The diagonal (SW to NE) die line thru the letters (GO)D WE on the scroll found on other die marriages with this reverse is now polished away.
- Tail feathers below shield are nearly polished away.
- Weak upper left and upper right wing feathers near shield

This is the second use of this reverse die.						
Date grid: M3, .032"	147 reeds		Typical diameter = 1.209" Rarity - 3			
Drapery die state: Full	ie state: Full Foot support: Strong		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: AU55			Coin from the Randy Wiley Collection			
Cross reference: WB-104.			Version 2.	.34		

#### 1877-S WB-34, Type 2, Very small S

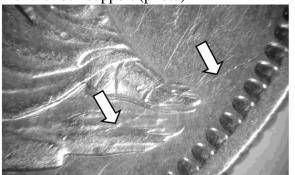
Obverse 27



Date right with a small lump in the gown's hem line above the loop (photo)



Die crack along the dentils thru the left edge of the rock support (photo)



- Die crack thru the rock support and foot into the field (photo)

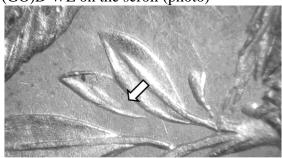
**Reverse Z** Type 2 Reverse



Very small S mintmark below the feather tip and tilted to the left (photo); unfinished inside the mintmark



Diagonal (SW to NE) die line thru the letters (GO)D WE on the scroll (photo)



- Weak olive leaf (photo)
- Weak tail feathers below shield
- Weak upper left wing feathers near shield

• Die crack on outer tips of stars 9-10
This is the third use of this reverse die

This is the third use of this reverse die.						
Date grid: M5, .030"	147 ı	reeds	Typical diameter = 1.208"	Rarity - 3		
Drapery die state: Partial		Foot support: Weak	Dentils: Obverse - Full; Rev	erse - Full		
Grade of coin depicted: AU55			Coin from the Randy Wiley	Coin from the Randy Wiley Collection		
Cross reference: WB-104.				Version 2.34		

#### 1877-S WB-35, Type 2, Very small S

Obverse 28



- Centered date (photo); curved line in the lower right corner of the shield (photo). A very faint die crack connects the bottoms of 877.
- Unfinished below Liberty's chin

#### **Reverse BB**

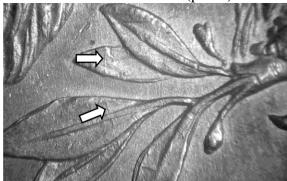
Type 2 Reverse



• Very small S mintmark below the feather tip and tilted to the right (photo). The mintmark is slightly recut east.



• Lump in the eagle's right wing to the right of the lower horizontal shield lines (photo)



- Arching raised line thru two olive leaves (photo)
- Small lump on the scroll to the right of the WE
- Weak tail feathers below shield

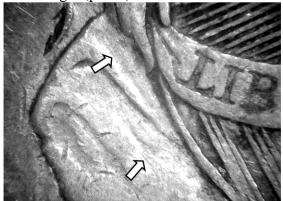
Date grid: M3.5, .026"	147 reeds		]	Гуріcal diameter = 1.209"	Rarity - 3
Drapery die state: None Foot support: Weak			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58				Coin from the Randy Wiley (	Collection
Cross reference: WB-104.					Version 2.34

## 1877-S WB-36, Type 2, Very small S

#### Obverse 29



• Date right (photo)



 Diagonal die lines in the rock to the left of the shield (photo)

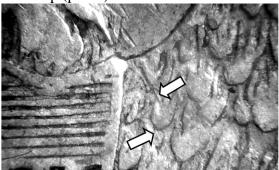


• Die line in Liberty's gown to the right of the scroll end (photo)

Reverse CC
Type 2 Reverse



 Very small S mintmark upright and below feather tip (photo)



- Diagonal die lines in the eagle's right wing near the upper right shield tip (photo)
- Weak scroll edges above (TR)UST
- Weak tail feathers below shield

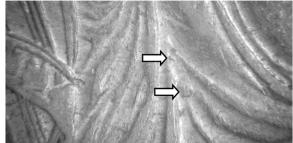
Date grid: M4.5, .028"	Unknown reeds		Typi	ical diameter = Unknown"	Rarity - 3
Drapery die state: Full	Foot support: Stron		ong	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PCGS XF40				Coin from the Bill Bugert Co	llection
Cross reference: WB-104.					Version 2.34

#### 1877-S WB-37, Type 2, Very small S

Obverse 30



• Date left (photo)



• Two lumps (one small and one large) in Liberty's gown to the right of the scroll end (photo)

Reverse DD
Type 2 Reverse



- Very small S mintmark under feather tip and tilted to the right (photo). The mintmark appears to be recut in this photograph but I believe it is bounce doubling.
- Weak tail feathers below shield

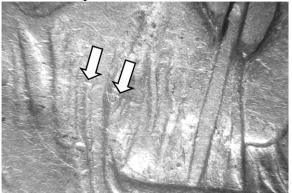
Date grid: M4, .030"	Unknown reeds		Typi	cal diameter = Unknown"	Rarity - 3
Drapery die state: Partial	Foot support: Weak		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: PCGS XF45				Coin from the Bill Bugert Co	llection
Cross reference: WB-104.				Version 2.34	

#### 1877-S WB-38, Type 2, Very small S, T-78S

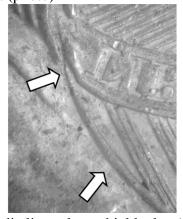
#### Obverse 31



Date left (photo)



 Diagonal die gouge across Liberty's right breast (photo)

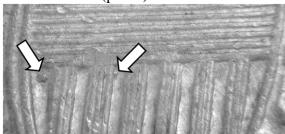


- Faint die lines along shield edge (photo)
- Unfinished under Liberty's chin
- LDS: die crack from toe to rim

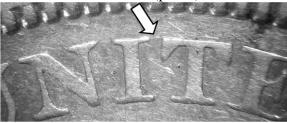
Reverse EE



 Very small S mintmark under feather tip and tilted to the left (photo)



• Die lump in the shield's upper left recessed area between the shield's edge and A1-3 and another between B1-3 and C1-3 (photo)



- LDS: Die crack along the tops of the letters (UN)IT(ED) (photo)
- Weak tail feathers below shield
- Transitional die with the rare 1878-S Half Dollar

Date grid: M2, .030" 14	147 reeds		ical diameter = 1.209"	Rarity - 5
Drapery die state: Full	Foot support: Strong	De	entils: Obverse - Full; Re	verse - Full
Grade of coin depicted: EDS - AU58, LDS - XF45			Coins from the Bill Bug	ert Collection
Cross reference: WB-104.				Version 2.34

#### 1878-S



The 1878-S is the key to the Liberty Seated Half Dollar date/mint set. With a very low mintage and a very high attrition rate, only about 60 coins are now known. The Bland-Allison Act of 1878 is most likely directly responsible for this low survival rate because it required the Branch Mints to produce massive quantities of the new Morgan Silver Dollars to the detriment of minting lower denominations. Additionally, circulating coinage was heavily used and consumed by the booming California economy of the late 1870's. Consequently, the few 1878-S half dollars that entered circulation were quickly worn and eventually discarded.

There is only one die marriage for 1878-S and the reverse die was also used in 1877-S. Both obverse and reverse dies are readily identifiable and only one reed count (147 which is different from the P and CC mint reed counts) makes authentication of this rare date simple and reliable.

Mintage	Number of Die	Obverse	Reverse	Reed Counts
	Marriages	Dies	Dies	Known
12,000	1	1	1	1 (147)

1878- Obverse and R identification	everse die	Type 2 reverse hub Very small mintmark Large lumps in reverse shield, Die crack above (U)NIT(ED), Wavy line in eagle's left wing A	
Wavy line on Liberty's chest Hairy eye in Liberty, Arched die lines through obverse shield and Liberty's lower gown	M4.5, .028	1	WB-1

Randy Wiley and Bill Bugert conducted extensive research to document the existing 1878-S half dollars. When these rarities appear for sale, they are often at a public auction in plated catalogues thereby simplifying modern photographic pedigree matching and identification methods. From information collected from literature searches, interviews, and first hand observations, we estimate there are approximately 60 known with about 16 in Uncirculated condition. The following is a summary listing of the results of that research. Note that this table includes 54 coins; we believe there are a small number still undocumented but the total number of existing coins is most likely about 60. Additional information on any specific 1878-S half dollar pedigree may be obtained by contacting either one of us.

1878-S Half Dollars					
<u>Grade</u>	<b>Number Documented</b>				
MS	16				
AU	4				
XF	5				
VF	6				
F	5				
VG	8				
G	5				
AG to Poor	<u>5</u>				
Total	54				

The top 10 certified and publicly auctioned condition census 1878-S half dollars as currently (4/2009) exhaustively research and ranked by Randy Wiley are contained in the following table.

Rank	Latest Grade	1878-S Known Provenance (Current owner omitted)
		• Stack's Queller 10/2002: 678 @ \$161,000
		• Stack's Robison 2/1982: 1721 @ \$16,000
1	PCGS MS66	• B&R Fairfield 10/1977: 552 @ \$8,500
1	1 COS MISOO	• Stack's Clarke 10/1975: 352 @ \$8,000
		• Stack's Cox 4/1962: 2024 @ \$2,500
		• Stack's Egolf 5/1961: 1131 @ \$2,650
		• Stellar Collection 1997-2009 (PCGS holder labeled "Stellar")
2	2 PCGS MS65	• The Mint, <i>Coin World</i> ad, 10/20/1997 @ POR
		• New Netherlands T. James Clarke, 4/1956: 1342 @ \$775
		• Heritage CSNS 4/2009: 1124 @ \$184,000 (PCGS holder labeled
		"Pryor")
3	PCGS MS64	• B&M Swan 3/2004: 1510 @ \$92,000 (PCGS holder labeled "Pryor")
		• B&M Pryor 1/1996: 237 @ \$70,400 (PCGS holder labeled "Pryor")
		• Stack's Patten 5/1973: 418 @ \$6,750
		• Superior 1/2005: 288, No sale
		• B&M Gray 7/2004: 2403 @ \$80,500
4	PCGS MS63	• Stack's Halsell 3/1984: 754 @ \$15,950
+	1 COS MISOS	• Superior Auction '80 8/1980: 191 @ \$25,000
		• Superior ANA 8/1975: 693 @ \$8,750
		• Stack's Walton 10/1963: 963 @ \$2,800

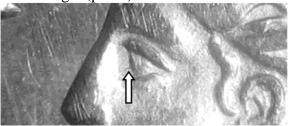
Rank	Latest Grade	1878-S Known Provenance (Current owner omitted)
		• B&M Noblet 1/1999: 186 @ \$63,000
		• Heritage ANA 7/1993: 6353 @ \$46,200
		<ul> <li>Heritage EXP Selections 10/1992: POR</li> </ul>
		• Jim O'Donnell Gobrecht Journal ad, 11/1990: \$52,500 (PCGS MS62)
5	PCGS MS63	• Akers Auction '90 8/1990: 1610 @ \$30,800
		• Jim O'Donnell Gobrecht Journal ad, 3/1990: \$57,500 (NGC MS63)
		• Heritage Dallas 6/1987: 853 @ \$18,700
		• Stack's Hawn 8/1973: 289 @ \$6,500
		• Mehl Atwater 6/1946: 383 @ \$383
		• B&M Rarities 7/2005: 563 @ \$96,600
		• ANR Kennywood 1/2005: 599 @ \$82,800 (PCGS MS63)
		• Jim O'Donnell private sale 9/1996: \$50,000
6	NGC MS65	• The Mint private sale, 5/1996: \$42,500
	NGC WISOS	• The Mint, <i>Coin World</i> ad, 5/1996: \$75,000
		• The Mint, <i>Coin World</i> ad, 1/1995: \$75,000
		• C. Davis private sale, 7/1994: \$Unknown
		• Stack's J. Stack 3/1975: 555 @ \$7,750
		• First American, <i>Coin World</i> ad, 9/2005: \$105,000
		• Heritage ANA Sale 7/2005:10214, No sale
		• First American, <i>Coin World</i> ad, 6/2005: \$110,000
		• Heritage Internet Auction 4/2005 @ \$85,000 (No sale)
7	PCGS MS63	• DLRC Richmond 3/2005: 1770: @ \$87,400 (NGC MS63)
		• Jim O'Donnell private sale, 3/1998 @ \$57,000?
		• B&M Eliasberg 4/1997: 2049 @ \$39,600
		• Stack's John Clapp estate private sale, 1942 @ \$?
		• Frossard NJ Collection, 3/1898 @ \$?
		• Ron Karp FUN show 1/2003 @ \$65,000
8	PCGS MS63	• Smythe NYC 7/2002: 6248 @ \$41,800
	1 000 11000	• Smythe Nebraska Part V 5/2001: 1253 @ \$50,600 (PCGS MS62)
		• Steve Ivy Gateway 8/1976: 507 @ \$8,000
9	PCGS MS61	• Stack's Byers 10/2006: 1272 @ \$83,375
	1 000 141001	• Herb Tobias private sale, 1970 @ \$3,700
		• Larry Briggs <i>Coin World</i> ad, 9/1/1997 @ \$33,750
		• Larry Briggs Cleveland show, 3/1997 @ \$33,750
10		• Larry Briggs <i>Coin World</i> ad, 12/1996 @ \$21,500
		• B&M Rarities 8/1996: 145 @ \$24,200
		• Leo Young Central States 4/1961: 1592 @ \$1,500

#### 1878-S **WB-1**

Obverse 1



Date right (photo)



Die line shaped as an eyelash on Liberty (photo) found on very high grade coins only

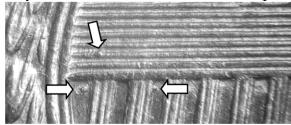


- Wavy line on Liberty's breast (photo) found on very high grade coins only
- Unfinished under Liberty's chin
- Arching lines thru shield and Liberty's lower gown

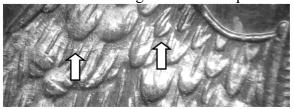




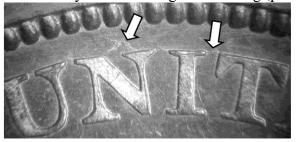
Very small S mintmark tilted to the left (photo)



Three lumps in shield as depicted (photo). The lump in the upper left recessed area has long been termed the "Diagnostic Die Chip."



Raised wavy line in the eagle's left wing (photo)



- Die crack above (U)NIT(ED) (photo) found on all 1878-S halves
- This die cracked in 1877 and is transitional with 1877-S.

All high grade coins have proof-like surfaces. Typical diameter = 1.208" Date grid: M4.5, .028" 147 reeds only Rarity - 5 Drapery die state: Full Foot support: Full Dentils: Head - Full; Tail - Full Grade of depicted coin: PCGS MS61 Coin from the Bill Bugert Collection Cross reference: WB-101 Version 2.34

## **Appendix A: References**

This appendix is not all inclusive of references used for this Register. Rather, it is meant to provide the Liberty Seated Half Dollar collector with a list of useful references to be used while collecting this series.

§

Beistle, Martin Luther. <u>A Register of Half Dollar Die Varieties</u> and <u>Sub-Varieties</u>. Shippensburg, PA: The Beistle Company, 1929.

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Cooper, Dennis R. <u>The Art and Craft of Coinmaking – A History of Minting Technology</u>. London: Spink & Son, 1988.

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The Gobrecht Journal Collective Volume III, First Edition, LSCC, 1990.

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The Gobrecht Journal Collective Volume V, First Edition, LSCC, 2009.

The Gobrecht Journal individual unbound issues from 2000 to the present.

National Archives notes researched and complied by Bill Bugert and Randy Wiley.

Wiley, Randy and Bill Bugert. <u>The Complete Guide To Liberty Seated Half Dollars</u>. Virginia Beach, VA, DLRC Press, 1993.

## **Appendix B: List of Contributors**

Randy Wiley Dick Osburn Scott Mickelson

## Appendix C: Checklist of S-Mint Die Marriages

$\sqrt{}$	Date	<b>WB-</b> #	Rarity	Variety
	1855-S	1	5	Large S
	1855-S	2	5	Large S
	1855-S	3	5	Large S
	1855-S	4	5	Large S
				C
	1856-S	1	4	Large S
	1856-S	2	4	Large S
	1856-S	3	4	Large S
	1856-S	4	5	Large S
	1856-S	5	4	Large S
	1856-S	6	5	Large S
	1857-S	1	4	Large S
	1857-S	2	5	Large S
	1857-S	3	4	Medium S, Blundered Date
	1857-S	4	4	Medium S
	1858-S	1	3	Large S
	1858-S	2	3	Large S
	1858-S	3	3	Large S
	1858-S	4	3	Large S
	1858-S	5	5	Large S
	1858-S	6	4	Large S
	1858-S	7	3	Large S
	1858-S	8	3	Large S
	1858-S	9	4	Large S
	1858-S	10	3	Large S
	1858-S	11	3	Medium S
	1858-S	12	3	Medium S, 8 in rock
	1858-S	13	3	Large S
	1858-S	14	3	Large S
	1950 C	1	2	Lawre C. Deaut 1
	1859-S	1	3	Large S, Recut 1
	1859-S	2 3	3	Large S, Errant 9 in rock
	1859-S			Large S
	1859-S	4	3	Large S
	1859-S	5	4	Large S Medium S
	1859-S	6	3	
	1859-S	7	3	Medium S, Recut 1859
	1859-S	8	4	Large S, recut 18
	1860-S	1	3	Large S
П	1860-S	2	3	Medium S
$\Box$	1000-2	2	3	Modium 9

$\sqrt{}$	Date	<b>WB-</b> #	Rarity	Variety
	1861-S	1	3	Medium S
	1861-S	2	4	Medium S
	1861-S	3	3	Large S
	1861-S	4	3	Large Recut S
	1861-S	5	4	Medium S
	1861-S	6	3	Large S
	1861-S	7	6	Large S
	1861-S	8	6	Large S
	1861-S	9	2	Large S
	1861-S	10	4	Large S
	1862-S	1	3	Large S, Damaged 6
	1862-S	2	5	Small wide broken S, Damaged 6
	1862-S	3	4	Small wide broken S, Broken 6
	1862-S	4	3	"Bearded Liberty," Medium S, Damaged 6
	1862-S	5	2	Large S, Weak 6
	1862-S	6	5	Large S, Repaired 6
	1863-S	1	3	Small Unbroken S
	1863-S	2	3	Small Unbroken S
	1863-S	3	3	Small Partially Broken S
	1863-S	4	3	Small Broken S
	1864-S	1	2	Large S
	1864-S	2	4	Small wide perfect S
	1864-S	3	3	Small wide broken S
	1864-S	4	3	Small wide broken S
	1864-S	5	4	Small thin S
	1865-S	1	4	Small wide broken S
	1865-S	2	3	Small thin S, recut 1 and 5
	1865-S	3	3	Small thin S
	1865-S	4	4	Small thin S, recut 1 and 5
	1865-S	5	2	Small thin S
	1865-S	6	4	Small thin S
	1865-S	7	2	Small thin S, recut 1
	1865-S	8	4	Small thin S
	1865-S	9	4	Small thin S, recut 1
	1866-S	1	4	No-Motto, small thin S
	1866-S	2	3	With-Motto
	1866-S	3	3	With-Motto, Double Die Reverse
	1866-S	4	4	With-Motto, Double Die Reverse, Errant digit in dentils
	1866-S	5	4	With-Motto, Errant digit in dentils
	1866-S	6	6	With-Motto
	1866-S	7	3	With-Motto
	1866-S	8	3	With Matter Francis Scienters'in
	1866-S	9	4	With-Motto, Errant 86 in dentils

	Date	<b>WB-</b> #	Rarity	Variety
	1866-S	10	6	With-Motto
	1867-S	1	4	
	1867-S	2	3	
	1867-S	3	3	
	1867-S	4	3	Recut S
	1867-S	5	4	
	1867-S	6	3	Recut 186
П	1867-S	7	3	
П	1867-S	8	3	
	1867-S	9	4	Double die reverse
П	1867-S	10	3	Double die reverse
	100, 2	10		
	1868-S	1	4	Errant 8 in dentils
	1868-S	2	3	
	1868-S	3	2	High Date
	1868-S	4	3	Errant 68 in dentils
	1868-S	5	4	
	1868-S	6	3	
	1868-S	7	4	Errant 6 in dentils
	1868-S	8	3	High Date
П	1869-S	1	3	
П	1869-S	2	3	
	1869-S	3	3	
	1870-S	1	3	Date left
	1870-S	2	3	Date right
	1870-S	3	3	Date left and weak
	1870-S	4	4	Date right
П	1871-S	1	3	Doubled Obverse Die, Incomplete S
П	1871-S	2	3	Very small thick top S
	1871-S	3	3	Very small thick top S
	1871-S	4	2	Small wide S
П	1871-S	5	3	Very small thick top S
П	1871-S	6	3	Very small thin top S
П	1871-S	7	3	Small wide S
	1871-S	8	4	Small wide S
			_	
	1872-S	1	3+	Small wide S
	1872-S	2	3+	Small wide S
	1872-S	3	3+	Medium-small S
	1872-S	4	3+	Medium-small S
	1873-S	1	3+	Arrows

$\sqrt{}$	Date	<b>WB-</b> #	Rarity	Variety
	1874-S	1	3	Arrows, Small wide S
	1874-S	2	5	Arrows, Medium-small S
	1874-S	3	3	Arrows, Minute S
	1874-S	4	8	Arrows, Minute S
	1875-S	1	4	Medium-small S
	1875-S	2	4	Small wide S
	1875-S	3	4	Recut S
	1875-S	4	3	Recut S
	1875-S	5	3	
	1875-S	6	3	
	1875-S	7	3	
	1875-S	8	3	
	1875-S	9	3	
	1875-S	10	3	
	1875-S	11	3	
	1875-S	12	3	
	1875-S	13	3	
	1875-S	14	3	
	1875-S	15	3	
	1875-S	16	3	
	1875-S	17	3	Spiked 5
	1875-S	18	4	Errant 1 from Rock
	1875-S	19	5	Micro S
	1875-S	20	3	
	1875-S	21	3	
	1875-S	22	3	
	1876-S	1	3	Micro S
	1876-S	2	4	Micro S
	1876-S	3	4	Micro S
	1876-S	4	4	Recut 6, Micro S
	1876-S	5	4	Micro S
	1876-S	6	4	Micro S
	1876-S	7	3	Micro S
	1876-S	8	3	Micro S
	1876-S	9	3	Micro S
	1876-S	10	4	Micro S
	1876-S	11	4	Micro S
	1876-S	12	7	High Micro S
	1876-S	13	4	Micro S
	1876-S	14	4	"Smoking Liberty," Micro S
	1876-S	15	4	Very small Recut S
	1876-S	16	3	Micro S
	1876-S	17	3	Very small Recut S
	1876-S	18	4	Very small Recut S
	1876-S	19	4	Very small S
	1876-S	20	4	Very small S

$\sqrt{}$	Date	<b>WB-</b> #	Rarity	Variety
	1876-S	21	4	Very small S
	1876-S	22	4	Very small S
	1876-S	23	4	Recut 6, Very small S
	1876-S	24	4	Very small S
	1876-S	25	3	Very small S
	1876-S	26	4	Very small S
	1876-S	27	4	"Smoking Liberty," Very small S
	1876-S	28	3	Very small S
	1876-S	29	3	Very small S
	1876-S	30	3	Very small S
	1876-S	31	3	Very small S
	1876-S	32	4	Very small S
	1876-S	33	4	Very small S
	1876-S	34	3	Very small S
	1876-S	35	3	Very small S
	1876-S	36	3	Very small S
	1876-S	37	3	Very small Recut S
	1876-S	38	3	Very small S
	1876-S	39	3	Very small S
	1876-S	40	4	Very small Recut S
	1876-S	41	4	Very small S
	1876-S	42	6	Type 2, Very small Recut S
	1876-S	43	7	Type 2, Very small S
	1877-S	1	3	Type 1, Micro S
	1877-S	2	3	Type 1, Micro S
	1877-S	3	3	Type 1, Micro S
	1877-S	4	3	Type 1, Micro S
	1877-S	5	3	Type 1, Micro S
	1877-S	6	7	Type 1, Micro S, Weird F
	1877-S	7	3	Type 1, Micro S
	1877-S	8	3	Type 1, Very small S/S/S
	1877-S	9	3	Type 1, Very small S
	1877-S	10	3	Type 1, Very small S
	1877-S	11	3	Type 1, Very small S
	1877-S	12	3	Type 1, Very small S
	1877-S	13	3	Type 2, Very small S
	1877-S	14	4	Type 1, Very small S
	1877-S	15	4	Type 2, Very small S
	1877-S	16	4	Type 2, Very small S
	1877-S	17	4	Type 2, Very small S
	1877-S	18	4	Type 2, Very small S
	1877-S	19	4	Type 1, Micro S
	1877-S	20	3	Type 2, Very small \$ mintmark
	1877-S	21	3	Type 1, Micro S
	1877-S	22	3	Type 2, Very small S
	1877-S	23	3	Type 2, Very small \$ mintmark
Ш	1877-S	24	3	Type 2, Very small S

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$\sqrt{}$	Date	<b>WB-</b> #	Rarity	Variety
	1877-S	25	5	Type 1/2, Very small S
	1877-S	26	4	Type 2, Very small S
	1877-S	27	4	Type 2, Very small S
	1877-S	28	4	Type 2, Very small S
	1877-S	29	3	Type 2, Very small S
	1877-S	30	3	Type 2, Very small Recut S
	1877-S	31	3	Type 2, Very small S
	1877-S	32	3	Type 2, Very small S
	1877-S	33	3	Type 2, Very small S
	1877-S	34	3	Type 2, Very small S
	1877-S	35	3	Type 2, Very small S
	1877-S	36	3	Type 2, Very small S
	1877-S	37	3	Type 2, Very small S
	1877-S	38	5	Type 2, Very small S, Transitional with 1878-S
	1878-S	1	5	Very small S