

Possible Adjustment to Carson City Mint Coinage for 1882

by

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Production of George Morgan's standard silver dollar coin tested the abilities of U.S. mints to meet high quality standards for large quantities of dollar coins, while buying silver bullion in open markets. This was especially difficult for the Carson Mint, which, although located near large silver deposits, saw most of the silver going to San Francisco for coinage.

From July 1879 to June 30, 1880 only enough bullion was available to produce 8,318,000 silver dollars at all the mints, combined. The situation was acute at Carson and coinage was suspended on November 1, 1879 when only 12,342.41 standard ounces (\$14,362 value) of bullion remained in its vault. The Mint remained open for bullion purchases and by April 16, 1880 there were 227,087.54 standard ounces (\$258,427 value) available. This amount, with the prospect of additional supplies, justified the resumption of coinage beginning May 1, 1880,¹ when 87,000 pieces were struck.² Coinage continued to April 1, 1881 during which \$883,590 were coined, when, for lack of sufficient bullion, manufacture of coins was again suspended and remained so until the close of the year.³

For calendar year 1880, Carson Mint coined 591,000 silver dollars⁴ and during 1881, 296,000 of that year were available for distribution.⁵

In 1880 Mint Bureau headquarters in Washington, D.C. began routine examination of "Test Assay" (later called "Special Assay") coins. These were usually two samples pulled from each delivery and were intended as an independent check on quality. This was especially important due to the large volume and tight production schedules of silver dollars, where the chances of mistakes were intensified.⁶

On August 2, 1880 Carson Superintendent James Crawford sent one \$10 Eagle and two standard silver dollars to director Burchard in Washington for testing.

I send you this day by mail registered letter containing Special Test Coins of the Coiner to the Superintendent during the month of July 1880 as per statement herewith enclosed.⁷

¹ Annual Report of the Director of the Mint – 1880. 6-7, 13.

² RG104 E-229 Box 17 of 17. Statement dated June 14, 1880 showing number of pieces struck from one pair of dies during May.

³ Annual Report of the Director of the Mint – 1881. 14-15.

⁴ Annual Report of the Director of the Mint – 1881. 31.

⁵ Annual Report of the Director of the Mint – 1882. 35.

⁶ San Francisco and Carson Mints had already been testing each other's coins. This produced quicker transmission of results between the western mints and made it easier to identify and correct defects.

⁷ RG104 E-229 Box 17 of 17. Letter dated August 2, 1880 to Burchard from Crawford.

MINT OF THE UNITED STATES AT CARSON, NEVADA.

SPECIAL-TEST COINS reserved during the Month of *July*, 1880.

G O L D.

DOUBLE-EAGLES.		EAGLES.		HALF-EAGLES.		THREE DOLLARS.		QUARTER-EAGLES.		DOLLARS.	
NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.
		1	\$ 10. ⁰⁰ / ₁₀₀								

S I L V E R.

ONE -DOLLARS.		HALF-DOLLARS.		QUARTER-DOLLARS.		TWENTY CENTS.		DIMS.	
NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.	NO. OF PIECES.	VALUE.
2	\$ 2. ⁰⁰ / ₁₀₀								

(L. L. C.)

James Crawford
Superintendent.

RG104 Entry 229 Box 17 of 17

In October, 1880, results of this test were handed to Burchard.⁸ The Bureau's Assayer had discovered that a silver dollar from the coiner's July delivery of that year was below the legal limit of tolerance. A telegram was sent immediately to Carson:

Make no payments of silver dollars from delivery number ten, July fifteenth, number eleven July thirty first, and number thirteen August thirteenth, but retain the same in your Mint until further advised. If any have gone out wire me when and to whom.⁹

The director sent a follow-up telegram on October 18 including his order to "Pay out no dollars coined since July first until further advised."¹⁰ Two days later, yet another telegram expanded the previous order.

Silver assay coins for September also below standard. Pay out no silver coinage of 1880. Letter by mail.¹¹

Burchard sent a more detailed letter on October 21, explaining what had been discovered.

Enclosed I forward you the reports of the Assayer on the test assay coins forwarded to this office since the first of July last. You will observe that all the silver coins except the one taken from delivery number 12 have been found below the legal limits of tolerance.

Re-assays made by the Assayer at the New York Assay Office corroborate these reports. The test assay coins from the other Mints were assayed at the same time and in the same manner and found to conform to the standard.

As the test coin from every delivery of standard dollars but one at your mint during those months was below the tolerance for fineness, discredit is thrown upon all coins in the deliveries from which these defective coin have been taken, and of the calendar year,

⁸ A delay of two months was common. The mints were supposed to hold issuance until completion of the independent HQ assay, however that rule was often ignored.

⁹ RG104 E-235 vol 23. Telegram dated October 15, 1880 to Crawford from Burchard.

¹⁰ RG104 E-235 vol 23. Telegram dated October 18, 1880 to Crawford from Burchard.

¹¹ RG104 E-235 vol 23. Telegram dated October 20, 1880 to Crawford from Burchard.

if prior deliveries cannot be distinguished.

Upon your response to my telegram to pay out no dollars from the deliveries specified, that you could not distinguish between the deliveries, I telegraphed you yesterday to pay out no dollars coined in 1880.

Hereafter, until further advised, retain your monthly silver coinage until report of monthly test assay has been received. This will cause no inconvenience as you have sufficient coinage of previous year on hand from which to make payments. From the fact that you are unable to distinguish between the deliveries, it necessitates an examination of all dollars coined at your Mint in 1880.

You are therefore instructed to take from each sack of coins three pieces, from different parts of the sack, one from the top, one from about the middle, and one from the bottom. The pieces from each sack will be sealed in envelopes which you will number, and at the same time place a corresponding number upon the sack from which they were taken. You are instructed to attend to this duty personally and transmit the coins thus taken by registered mail in suitable packages to this office.

The coins of 1880, remaining in each sack will be sealed and retained until you are further advised. You will also inform me how many have been paid out, from the coinage of that year [1880].

As some undiscovered and unknown irregularity or error in the assay process may have occasioned and over-rating of the fineness of the Melter & Refiner's bars from which the ingots were prepared and subsequently an over-rating of the ingots themselves, you will institute such inquiries and examination as will disclose the facts in the case and report them to this office. Your early and prompt attention is requested.¹²

Carson Mint assayer William P. Prescott provided "a statement of the fineness at which ingots were passed by him, from January 1st, 1879 to September 30th, 1880."¹³ This list, now lost, was accompanied by an overall description of the Mint's practice in relation to ingot assays.

In compliance with your request I have the honor to report that the assay of silver ingots in conducted in the following manner. The samples of each melt are received from the Melter & Refiner (in the form of granulations) in two papers marked respectively "A," and "B," and the number of the melt. From these we weigh a sufficient amount to make the proper assay. Should they not agree the assay is made over and when we are perfectly satisfied that it is correct, we either pass or condemn [the ingot] on the granulations. This is the only check the assayer has on the different melts of ingots passed to the Coiner.

We have always endeavored to keep the granulations as near 0.899 as possible the limits being 0.898 to 0.9015 (the legal variation being 0.897 to 0.903).

In all our assays of chips from ingots, blanks from melts, etc., we have found each one inside of tolerance and as we have more melts over 0.899 than under, I can hardly see how it is possible that our coin should run under the tolerance.

We all know that there is great segregation in silver ingots, and I am only surprised that when the Carson Mint passes above 0.900 and the Philadelphia and San Francisco Mints pass under, that the Carson coin should not be above tolerance instead of below.

The San Francisco tests and the annual assays at Philadelphia have always proved our coin to be equal in fineness with the other mints.

I enclose a copy of assays of granulations from January 1st 1879 to last of September 1880, also assays of different melts of ingots (granulations, chips, and coin, etc.) taken in November 1880.¹⁴

Crawford selected 288 sample silver dollars in the manner requested by Burchard and sent them to Mint HQ. They arrived on November 17.¹⁵

¹² RG104 E-235 vol 23. Letter dated October 21, 1880 to Crawford from Burchard.

¹³ RG104 E229 Box 17 of 17. Letter dated November 11, 1880 to Burchard from Crawford.

¹⁴ RG104 E-229 box 17 of 17. Letter dated November 12, 1880 to Crawford from Prescott.

¹⁵ RG104 E-235 vol 23. Letter dated November 17, 1880 to Crawford from Burchard.

Assayer William Prescott died suddenly at 2 AM on December 5.¹⁶ He was replaced by Assistant Assayer, Josiah Morris Hettrich.¹⁷

Nothing more appears in mint records until January 26, 1881 when Crawford wrote to Burchard.

On November 6th 1880, complying with a request contained in a letter from you, I sent by mail one (1) box containing 288 standard silver dollars, and from these coins I have heard nothing.

It would please, could you advise me of the result of your assay of these pieces...and also [return to me] the 288 standard silver dollars, to enable me to keep my accounts straight.¹⁸

The new Assayer checked his supply of proof silver but found no error that could account for low fineness. He also sent samples from every ingot granulation to San Francisco for checking, but again found no discrepancy.¹⁹

In February 1881 the Annual Assay Commission met at the Philadelphia Mint. During their examination of gold and silver coinage from 1880 the Committee on Assaying, Herbert G.

Torrey, Ira Remusen, E. T. Frister, and P. D. P. Ricketts, identified a defective 1880 Carson Mint dollar. U.S. President Rutherford B. Hayes was notified as required.

To the President:

[The Annual Assay Commission] pursuant to law, do hereby certify that at the Assay of such coins made by them at the Philadelphia Mint on the 9th and 10th days of February 1881, one of such reserved coins, to wit: a standard silver dollar from the Carson City Mint, delivered by the Coiner to the Superintendent of that Mint on the 30th day of August 1880, being delivery No. 13 of that year, was found to contain but 893.7/1000^{ths} of silver, which is a greater deviation from the legal standard than is allowed by law.²⁰

<u>Carson City</u>	<u>Silver</u>	<u>Dollars</u>	
	Mass	"	898.8
	Single pieces	"	900.
			898.4
			897.6
			899.7
			898.8
			897.3
			898.4
			899.2
			900.
			897.3
			898.4
			893.7
			897.3
			900.2
			899.2
			898.2
			898.6
			898.4
<u>New Orleans</u>	<u>Gold</u>		

For calendar year 1880, silver dollar production of the Carson Mint was officially 591,000 pieces with no mention of 96,000 under embargo. Director Burchard explained the situation in his annual report for 1881.

As to fineness, the record states that in all cases, both in mass and single pieces, the coins from Philadelphia, San Francisco, and New Orleans were found to be correct, and safely within the limits of tolerance. But the committee on assaying reported that in the case of the Carson Mint, they found the assay of mass melt of silver to be very low, but within tolerance, and that one single piece showed a fineness below the limits of tolerance. This fact was reported to the President, as required by law.

¹⁶ RG104 E-229 box 17 of 17. Telegram dated December 6, 1880 to Burchard from Crawford.

¹⁷ RG104 E-229 box 17 of 17. Telegram dated December 6, 1880 to Burchard from Crawford.

¹⁸ RG104 E-229 box 17 of 17. Letter dated January 26, 1881 to Burchard from Crawford.

¹⁹ RG104 E-229 box 17 of 17. Letter dated February 25, 1881 to Crawford from Hettrich.

²⁰ Roger W. Burdette *Annual Assay Commission United States Mint 1800-1943, Disc 2*. Annual Assay Commission, February 9-10, 1881. Original meeting minutes and resolutions.

The assayer of the Mint Bureau, in October, 1880, in his assay of the coins required monthly to be forwarded to the Director for test, had discovered that a silver coin of the Carson Mint, from the coiner's July delivery of that year, was below the legal limit of tolerance. The superintendent of that mint was immediately directed not to pay out, but to retain in his possession all of the coins of that delivery, and to seal up, until further orders, all packages which might contain any of such coins, after selecting and forwarding to the Director sample coins from each package for further test. Ninety-six packages, each containing one thousand dollars, were thus sealed up and reserved for further assays at the bureau, and a special examination made by Andrew Mason, melter and refiner of the New York Assay Office, in conformity with the order of the President to investigate the matter, confirmed the previous assays, and demonstrated that the fineness of a certain bar of bullion, about to be melted for coinage, had been incorrectly stated to the melter and refiner of the Carson Mint, and that ingots of defective fineness made therefrom had afterward passed the assay department of that mint without detection.

It did not appear that the error had occurred through the neglect of the assayer's subordinates, and as the assayer himself had died shortly after the first discovery of the defective coinage, it became unnecessary to take any further action, except to order all the coins contained in the 96 packages to be remelted for coinage, which was done.²¹

This might have been the plan when Burchard's report was written but it was not what actually occurred. By October 1881 most of the 1880-CC dollars remained in a Carson Mint vault. On the 15th Burchard, with approval of Treasury secretary William Windom wrote to Carson Mint Superintendent Crawford:

Sir:

Referring to my letter of October 21, 1880, relative to silver dollars of defective fineness coined by you in 1880, you were instructed to hold said coins until further advised. From your letter of November 6th following, it appears that 96 sacks, containing \$1,000 each, embraced all the pieces of doubtful character in your possession and that you sealed and held this amount. Assays made at this Bureau of several single pieces taken from each of the 96 sacks developed the fact that while all the coins were not beyond the tolerance for fineness, yet so many were found less than their legal limit, as to render them whole amount doubtful.

In order that the public may be protected from the issuance of coin of less than full legal value, and that the purity of the National coinage may be conserved, you are hereby instructed, upon the resumption of coinage operations at your mint, to melt and recoin the whole amount of dollars of doubtful fineness referred to, which were sealed and retained in your possession.

In so doing the amount of silver remelted will not appear in your Bullion Accounts, nor will the dollars re-coined be a part of your contingent of the monthly coinage prescribed by law. The dollars melted will simply be replaced by an equal number of acknowledged fineness.

Your will report the amount melted and re-coined, and in your monthly coinage report you will distinguish between those re-coined and those coined from silver purchases, in filling your monthly contingent of silver dollar coinage.²²

Instructions were clear – once coinage was resumed, Crawford was to melt the embargoed coins. The metal would be recoinced into silver dollars but there was to be no record in either bullion accounts or the monthly production quota. The effect was to keep all records as if the 1880 coins were normal and not replaced.

²¹ Annual Report of the Director of the Mint – 1881. 10.

²² RG104 E-235 vol 26. Letter dated October 15, 1881 to Crawford from Burchard, approved by Windom.

This also presented a problem: it was now October 1881. Dies for 1880 no longer existed, so coins could not be backdated. They could be given an 1881 date, but only if the Mint resumed operations and if there were enough “1881” date obverse dies, and time to do the work. No silver dollars were delivered in October 1881 and only 75,000 for each of November and December.²³ (November 18 – 38,000; 21 – 20,000; and 28 – 17,000, and December 13 – 42,000; and 31 – 33,000.²⁴) He might have wanted to use his remaining 1881 dies only for bullion on hand. Another possibility is that Burchard wanted to preserve the coins just in case the Assay Commission discovered a problem

In November Crawford received fifteen (15) pairs of dollar dies for 1882, numbered 21 through 35 on November 10,²⁵ but no more 1881 dies.

To further confuse the situation, and likely respond to the Assay Commission’s discovery, at some point in 1881 three sacks out of the 96 embargoed in Carson City were shipped east for individual melting and assay. Bag No. 65 was sent to the New York Assay Office and melted by Andrew Mason, Melter & Refiner, on March 18. This bag assayed at 894.7 fine, substantially below tolerance.²⁶ Two more sacks, No. 3 and No. 9 were sent to Winfield P. Lawver, Assayer at Mint Headquarters in Washington D.C., and were reported as 897.9 and 894.9 fine respectively on July 1.²⁷ Two out of the three bags tested were well below tolerance and this must have encouraged Burchard’s October 15 instructions.

At the same time Crawford was reminded about returning all remaining 1881 reverse dies to Philadelphia as part of a new Mint HQ policy.

...the instructions embraced in my letter of October 20, 1880 [state that] all obverse dies sent you for 1881 are to be destroyed, and all reverse dies sent for that year, and not used are to be returned to the Mint at Philadelphia.

The coinage of 1882 will be commenced with an entirely new set of dies numbered in consecutive order for that year....²⁸

In February 1882, Carson Mint’s Melter & Refiner, George W. Bryant, melted the remaining 93 bags of 1880-CC dollars and cast most into coinage ingots. Results of the melts and blanks taken from the new ingots were reported by Assayer Josiah M. Hetrich. The report is presented here to aid collectors in understanding the M&R aim points for silver alloy, but also the effects of silver segregation on the fineness of blanks. Out of forty-four melts, two were cast into shoe molds used for bullion bars and ten were condemned for low fineness or inconsistent mixture of silver and copper. Data for blanks was omitted for five melts.²⁹

The result of remelt of 96 sacks of Condemned Standard Silver Dollars is as follows:

Sack No. 3	897.9	} These three sacks were remelted experimentally.
Sack No. 9	894.9	
Sack No. 63	894.7	

The regular results for recoinage resulted as follows (opposite the fineness of the felt I furnish you the fineness of blanks cut therefrom, with the position in the strip from which taken. “T” represents top; “C” [represents] center; and “P” [represents] point.

²³ RG104 E-272 “Coinage Executed by Month” 1881. 20-22. The Carson Mint was closed to coinage from April through October 1881.

²⁴ RG104 E-271 vol 2. 243-245.

²⁵ RG104 E-1 box 125. Letter dated November 10, 1881 to Snowden from Crawford.

²⁶ RG104 E-229 box 17 of 17. Letter dated February 17, 1882 to Crawford from Hetrich. 1, 5.

²⁷ RG104 E-229 box 17 of 17. Letter dated February 17, 1882 to Crawford from Hetrich. 1, 5.

²⁸ RG104 E-235 vol 27. Letter dated October 19, 1881 to Crawford from Burchard.

²⁹ A “melt” included approximately 2,000 to 2,400 troy ounces of metal. Thus, each melt in Hetrich’s report consisted of somewhat more than two bags of 1880-CC silver dollars.

Melt Number	Fineness of Ingot	Fineness of Blank	Position Blank Taken from Ingot
1	899.4	Cast into shoe mold	
2	897.4	Cast into shoe mold	
3	898.2	898.9	T
4	898.4	898.3	C
5	898.8	899.0	T
6	898.1	899.4	P
7	898.8	899.3	C
8	898.6	899.5	T
9	899.1	900.0	P
10	898.5	898.6	C
11	898.5	898.4	T
12	899.3	900.0	P
13	897.8	Condemned	
14	898.5	899.5	C
15	898.5	899.9	T
16	898.5	899.6	P
17	898.9	899.5	C
18	898.6	899.7	T
19	897.4	Condemned	
20	897.8	Condemned	
21	896.8	Condemned	
22	896.8	Condemned	
23	898.6	899.3	P
24	899.1	898.4	C
25	898.6	899.6	T
26	898.3	898.4	P
27	898.6	898.3	C
28	898.3	899.5	T
29	898.2	899.5	T
30	898.0	899.1	C
31	897.8	Condemned	
32	898.0	899.2	T
33	898.6	898.8	P
34	898.2	898.8	C
35	899.6	Condemned for Bad Mixture	
36	898.4	No Data	
37	899.7	No Data	
38	898.4	No Data	
39	899.1	No Data	
40	898.2	898.2	T
41	898.8	No Data	
42	898.6	Condemned	
43	897.8	Condemned	
44	898.4	Condemned for Bad Mixture	

Respectfully,
J. M. Hetrich, Assayer³⁰

With no additional correspondence available, it appears that 96,000 1880-CC silver dollars were recoined with an 1882-CC date.

³⁰ RG104 E-229 box 17 of 17. Report dated February 17, 1882 to Crawford from Hetrich.

Summary

Available correspondence indicates that 96,000 standard silver dollars struck between July 1 and September 30, 1880 were embargoed due to low fineness on special assay tests. This was out of 234,000 struck during those three months; 138,000 had already been issued. The substandard fineness was verified by the Annual Assay Commission during its February 1881 meeting, and this intensified internal investigation. Unfortunately the Carson Mint Assayer had died on December 6, and no one could determine how the purity mistake had occurred.

In March and again July 1881, sample bags from the Carson Mint embargo were tested at the New York Assay Office and Mint HQ's assay lab. Again, substantial defects were found. Finally, in February 1882, the Carson Mint melted all 93 remaining bags of dollars, prepared ingots, cut blanks and presumably struck 1882-CC dollars eventually totaling 96,000 pieces.

Neither melting nor recoinage were included in 1882 records, nor was 1880 coinage corrected. The result was to reduce the quantity of 1880-CC dollars available from 591,000 to 495,000 pieces, and increase 1882-CC dollars from 1,133,000 to 1,229,000, but without any net change in silver dollars struck or seigniorage accounts.

Collectors have long known about the "missing" 1880-CC dollars, and hobby publications routinely present net mintage not the gross amount. Yet, now we know what likely happened to the coins and how Treasury and Mint adjusted their records.